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1. Document ID: US 20040158488 A1

Using default format because multiple data bases are involved.

L1: Entry 1 of 57

File: PGPB

Aug 12, 2004

PGPUB-DOCUMENT-NUMBER: 20040158488

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DOCUMENT-IDENTIFIER: US 20040158488 A1

TITLE: Internet based automated real estate post card mailout system

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INVENTOR-INFORMATION:

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US-CL-CURRENT: 705/14

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [Claims](#) [KMC](#) [Draw Desc](#) [Ima](#)

2. Document ID: US 20040125982 A1

L1: Entry 2 of 57

File: PGPB

Jul 1, 2004

DOCUMENT-IDENTIFIER: US 20040125982 A1

TITLE: Automated copyright detection in digital images

Detail Description Paragraph:

[0028] The printing and finishing facility 40 includes network servers 42 for communicating with the data center 30, printers 45 for printing images on physical surfaces, finishing equipment 46 for operations after the images are printed, and shipping stations 48 for confirming the completion of the orders and shipping the ordered photo products to recipients 100 and 105 (the user 70 can be a recipient). The printers 45 are digital printers that takes digital data input and produces images on a receiver. Examples of printer 45 include digital photographic printers such as Fuji Frontier Minilab printers, Kodak DLS minilab printers, Gretag CYRA FastPrint digital photo printer, or Kodak I-Lab photo printers. The printers 45 can include offset digital printers or digital printing presses such as HP Indigo UltraStream 2000 digital printing press, Xerox's DocuColor printers etc. The printers 45 can also include large format photo or inkjet printers for printing posters and banners. The printing and finishing facilities 40,41 can include a film processor 43 for processing exposed films, and a scanner 44 for digitizing a processed film stripe. The network servers 42 are connected with the data center 30 via a computer network 80 such as a Local Area Network or a Wide Area Network. The order information and image data can be transferred from servers 32 to the network servers 42 using a standard or a proprietary protocol (FTP, HTTP, among others). The finishing equipment 46 can perform any operations for finishing a complete photo product other than photo printing such as cutting, folding, adding a cover to photo

book, punching, stapling, gluing, binding, envelope printing and sealing, packaging, labeling, weighing and postage metering. The finishing operations can also include framing a photo print, recording image data on a CD-ROM, etc. Furthermore, the printers and the finishing equipments can be located at different sites. Some finishing operations can be fulfilled by an external contractor. More detailed workflow for producing folded greeting cards is illustrated in FIG. 4.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Ima
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3. Document ID: US 20040109147 A1

L1: Entry 3 of 57

File: PGPB

Jun 10, 2004

DOCUMENT-IDENTIFIER: US 20040109147 A1

TITLE: Image prints having customized backprinting message

Abstract Paragraph:

A system and method of backprinting image prints in which an order is received specifying one or more recipients and, for each specified recipient, a set of one or more images associated with that recipient. For each recipient specified by the order, the images associated with the recipient are separated into at least one printable unit of images, and, for each printable unit, each image in the printable unit is printed on a first side of an image print. Backprinting information is backprinted on the other side of one or more of the image prints. The backprinting information can be received from a user and backprinted onto one or images.

Summary of Invention Paragraph:

[0020] The present inventors recognized that it would be advantageous to take a single multiple-recipient order for image prints, break it down into sub-orders corresponding to a single recipient, break down each sub-order into printable units (referred to as "sub-batches") having matching processing parameters, and scheduling and printing the sub-batches on automated printing equipment in an optimized manner.

Summary of Invention Paragraph:

[0022] In one aspect, a method of backprinting image prints includes receiving an order specifying one or more recipients and, for each specified recipient, a set of one or more images associated with that recipient. The method may also include, for each recipient specified by the order, separating the images associated with the recipient into at least one printable unit of images and, for each printable unit, printing each image in the printable unit on a first side of an image print. The method further may include backprinting on the other side of one or more of the image prints.

Summary of Invention Paragraph:

[0025] In another aspect, a backprinting system may include a front-end computer sub-system for receiving an order specifying one or more recipients and, for each specified recipient, a set of one or more images associated with that recipient. The system also may include a scheduler, in communication with the front-end computer sub-system and the plurality of printers, that, for each recipient specified by the order, separates the images associated with the recipient into at least one printable unit of images. The system may further include one or more printers, in communication with the scheduler, for printing each image in a printable unit on a first side of an image print. Moreover, the system may include one or more backprinters, each backprinter receiving one or more image prints from at least one of the one or more printers and backprinting on the other side of the one or more image prints. Each backprinter may backprint non-image information on the one or more image prints.

Summary of Invention Paragraph:

[0041] Also, backprinting information (e.g., non-image information) can be backprinted on

the back of an image print. The information backprinted on the back of an image print can be used, for example, in the print lab to identify and/or track individual image prints as well as the sub-batches, batches, sub-orders, and orders with which the image prints are associated. Also, the backprinted information can be used to convey additional information to a recipient of the image print (e.g., a user-input message, advertisement, where reprints can be ordered, and/or tracking information such as an image number and/or sub-order or order number). The backprinting information can also be used to encode an audio message (e.g., an audio message provided by the photographer or other user) in a bar code that the recipient of the image print can decode to listen to the audio message.

Detail Description Paragraph:

[0074] FIG. 4A is a block diagram of one deployment of a print generation and distribution system 300. In general, the system of FIG. 4A enables users to transmit images to a photo-finisher and then order prints of those images to be sent to one or more recipients. In FIG. 4A, one or more customers 302-304 communicate with the system 300 over a wide area network 310 such as the Internet. In one embodiment, the system 300 stores digital images that have been submitted by the customers 302-304 over the Internet for subsequent printing and delivery to designated recipients.

Detail Description Paragraph:

[0077] In general, this process of instantiating multiple image instances and re-ordering those instances as appropriate to build sub-orders represents a non-linear workflow model which, among other advantages, enables a user, through a single print order (delimited, for example, by a single transaction sequence and/or a single credit or debit card charge), to specify multiple different recipients, each of whom can receive his or her own personalized set of prints in which each can be generated according to customizable parameters (e.g., size, number of copies, finish, personal message, etc.). In addition, the non-linear workflow can cause a dramatic increase in the efficiency and/or speed with which prints can be generated and distributed to one or more recipients.

Detail Description Paragraph:

[0078] FIG. 4B illustrates an example of a non-linear workflow in which sub-orders are generated from a print order specifying multiple recipients. In this example, assume that a user places an order 352 for prints (for example, by creating associations between images and recipients) identifying three different recipients A, B, and C, each of whom is to receive a set of prints selected from images 1-10. In this example, assume that Recipient A is to receive prints of Images 1, 2, 4 and 8 (Recipient A's image associations are indicated by solid lines), Recipient B is to receive prints of images 1, 7 and 9 (Recipient B's image associations are indicated by dashed lines) and Recipient C is to receive prints of Images 1, 2 and 7 (Recipient C's image associations are indicated by dotted lines). The images 1, 2, 4, 7, 8, and 9 in print order 352 are then instantiated and re-organized as appropriate to generate, or build, three separate sub-orders 354, 356, 358--one for each of the three different recipients A, B, C, respectively. Each of these sub-orders in turn is sent to the printing system to generate a contiguous run of prints for the associated recipient.

Detail Description Paragraph:

[0079] According to this example, Image 1 would be instantiated three times, once for each of the three different print sub-orders 354, 356, and 358 in which it is included (that is, each of Recipients A, B, and C is to receive a print of Image 1). Similarly, Image 2 would be instantiated twice (one instance for Recipient A's sub-order 354 and another instance for Recipient C's sub-order 358), as would Image 7 (one instance for Recipient B's sub-order 356 and another instance for Recipient C's sub-order 358). Each of the remaining images (4, 8 and 9) would be instantiated only once because in each case the image is being printed for, and sent to, only a single recipient (equivalently, is part of a single sub-order). As the images are instantiated according to the various sub-orders for which they are required, the image instances are inserted into a sub-order sequence, which when completely built, can be sent to the printer to generate a corresponding run of prints.

Detail Description Paragraph:

[0082] FIG. 5 is a flowchart of a process that allows a user to transmit images to a

photo-finisher and then order prints of those images to be sent to one or more recipients. In general, the print generation and multi-recipient distribution process of FIG. 5 is oriented to an image, or set of images, of which a user desires to distribute prints to a group of one or more recipients. That is, a user's print order is delimited by a set of images selected by the user and not by the number or location of recipients to receive the prints.

Detail Description Paragraph:

[0087] For example, a public entry terminal placed at a drug store could have a slot that accepts removable storage media, such as a FLASH memory card. On insertion, the public entry terminal could read image files from the inserted storage medium. Alternatively, or in addition, the public terminal could include one or more data ports (e.g., a USB or SCSI port) through which users could upload images to the public terminal directly from their digital cameras. The uploaded image files could be displayed on a monitor to the user, who could then select images of which prints are desired, specify print parameters, and designate recipients for the prints. In addition, the public entry terminal could include application software or utilities that allow users to edit images as desired, for example, to resize or crop images, to change an image's orientation, to remove redeye, to modify the color characteristics, etc. In any event, after the user had uploaded his or her images and has specified the images to be printed and their respective intended recipients, the public entry terminal could formulate a corresponding order and forward it on the photo-finisher's host system to initiate fulfillment.

Detail Description Paragraph:

[0093] After the prints, recipients and respective parameters have been specified, the user's order is fulfilled by making prints of the designated images and distributing them to the specified recipients (step 406). In general, fulfillment can be accomplished either by the photo-finisher itself or by another entity or company in cooperation with the photo-finisher. Potentially, the photo-finisher could have business arrangements with two or more different fulfillment companies, which could be dispersed geographically (at various locations around the country or world) to minimize shipping costs, labor costs and/or delivery time. Alternatively, or in addition, different fulfillment companies could be used which have different areas of expertise or production capability. For example, one fulfillment company could specialize in making standard photographic prints, another fulfillment company could specialize in printing greeting cards, yet another fulfillment company could specialize in generating T-shirts, and so on.

Detail Description Paragraph:

[0101] Image processing that does not depend on which type of printer or other output device will ultimately be used need only be performed once for each image in the order regardless of the number of times that the image ultimately will be printed. For example, if an image is to be printed for more than one recipient (e.g., if an image is included in more than one sub-order), such printer-independent processing activities need only be performed once for that image. Also, if a given image is to be printed multiple times on the same type of printer with the same print parameters, those image processing activities that are dependent on which type of printer and/or printer parameters ultimately will be used need only be performed once for that image and need not be performed for each of the multiple times that the image is to be printed on the same type of printer with the same print parameters.

Detail Description Paragraph:

[0104] In step 508, each image is instantiated (e.g., by creating a separate copy of data such as control and/or image data for that image) as needed for printing. For example, if desirable, a given image that is to be printed for multiple recipients can be instantiated at least once for each of the multiple recipients (e.g., for each sub-order and/or for each sub-batch). In addition, or alternatively, if the printer on which a given image is to be printed can operate in a more efficient manner (or if it is otherwise desirable to do so), an image that is to be printed multiple times on given printer can be instantiated once for each time that the image is to be printed.

Detail Description Paragraph:

[0105] In step 510, each image is printed (or a physical manifestation of each image is otherwise created) in accordance with the print ordering. The printing operation includes

printing or otherwise generating a physical representation of the image (e.g., printing the image on the front side of an image print). Printing can also include printing or otherwise including non-image information (e.g., bar codes, identification numbers, messages, advertisements, reorder information, etc.) on one or more of the prints or other physical manifestations of the image. The non-image information can be used for controlling and monitoring the printing, packaging, and/or shipping of the image and/or can be used to impart predetermined information to the recipient of the image. For example, as shown in FIG. 8, non-image information may be printed on the back (i.e., non-image side) of an image print 920 and may include a unique identification number 922 for the image from which the print was made (i.e., an "image ID" number), a unique order identification number 924 (which may encode recipient information), reorder information 926 such as a phone number 928 and/or a URL 930 for a website from which prints can be reordered, a bar code 932 (encoding, for example, an audio message or processing data), and/or a user specified message 934. Also, a different user specified message 934 can be printed for different recipients (e.g., one message can be printed for the person who took the image and other messages can be specified for the other recipients). In addition, the non-image information may include the name of the photographer who took the image, the date the image was taken, the date the image was printed, a copyright notice, and language describing any legal restrictions on using the image.

Detail Description Paragraph:

[0108] One embodiment of a system 600 in which the process 500 can be implemented is shown in FIG. 9. In the print lab system 600 shown in FIG. 9, each order includes control data and image data. The control data contains information such as print parameters (including print size, number of copies and print finish), user contact information, recipient information (including the shipping address of each recipient and the image IDs of each image associated with that recipient), payment information, and any special messages that are to be printed or encoded on any of the image prints included in the order. The image data includes the pixel data used to generate the image (e.g., JPEG data). In the embodiment shown in FIG. 9, the control data and the image data for each order are stored separately after originally being received from the user. The control data for each order is stored in an orders database 602, while the image data for each order is stored in an image archive database 604. It is to be understood, however, that at least some, if not all, of the control data can be stored with the image data (e.g., in the image archive database 604 or elsewhere) in either the orders database 602, the image archive database 604, or elsewhere, if the system designer found it desirable to do so.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KVNC	Draw Desc	Ima
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4. Document ID: US 20040101156 A1

L1: Entry 4 of 57

File: PGPB

May 27, 2004

DOCUMENT-IDENTIFIER: US 20040101156 A1

TITLE: Image ranking for imaging products and services

Detail Description Paragraph:

[0022] The printing and finishing facility 40 includes network servers 42 for communicating with the data center 30, printers 45 for printing images on physical surfaces, finishing equipment 46 for operations after the images are printed, and shipping stations 48 for confirming the completion of the orders and shipping the ordered photo products to recipients 100 and 105 (the user 70 can be a recipient). The printers 45 are digital printers that takes digital data input and produces images on a receiver. Examples of printer 45 include can be digital photographic printers such as Fuji Frontier Minilab printers, Kodak DLS minilab printers, Gretag CYRA FastPrint digital photo printer, or Kodak I-Lab photo printers. The printers 45 can also include offset digital printers or digital printing presses such as HP Indigo UltraStream 2000 digital printing

press, Xerox's DocuColor printers etc. The printers 45 can also include large format photo or inkjet printers for printing posters and banners. The printing and finishing facilities 40,41 can include a film processor 43 for processing exposed films, and a scanner 44 for digitizing a processed film stripe. The network servers 42 are connected with the data center 30 via a computer network 80 such as a Local Area Network or a Wide Area Network. The order information and image data can be transferred from servers 32 to the network servers 42 using a standard or a proprietary protocol (FTP, HTTP, among others). The finishing equipment 46 can perform any operations for finishing a complete photo product other than photo printing such as cutting, folding, adding a cover to photo book, punching, stapling, gluing, binding, envelope printing and sealing, packaging, labeling, weighing and postage metering. The finishing operations can also include framing a photo print, recording image data on a CD-ROM, etc. Furthermore, the printers and the finishing equipments can be located in different sites. Some finishing operations can be fulfilled by an external contractor. More detailed workflow for producing folded greeting cards is illustrated in FIG. 4.

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Draw Desc](#) | [Ima](#)

5. Document ID: US 20040100652 A1

L1: Entry 5 of 57

File: PGPB

May 27, 2004

DOCUMENT-IDENTIFIER: US 20040100652 A1

TITLE: Method and system for automatically forwarding an image product

Abstract Paragraph:

A method is disclosed of automatically forwarding hard copy image products to a designated recipient, comprising the steps of: analyzing a digital image and developing a unique ID with respect to the image based on the analysis; storing the unique ID and associated order informations with respect to the image in a storage database, the order informations including additional information and a designated recipient for receiving a hard copy image product made using the digital image; printing the digital image on to a medium using a first printer so as to obtain the hard copy image product; scanning the hard copy image product subsequently by a scanning device and analyzing the digital image so as to obtain the unique ID and accessing the database for obtaining the order informations using the unique ID.

Summary of Invention Paragraph:

[0007] In answer to these and other problems of the prior art, according to one aspect of the present invention, there is provided a method of automatically forwarding hard copy image products to a designated recipient, comprising the steps of analyzing a digital image and developing a unique ID with respect to the image based on the analysis; storing the unique ID and associated order informations with respect to the image in a storage database, the order informations including additional information and a designated recipient for receiving a hard copy image product made using the digital image; printing the digital image on to a medium using a first printer so as to obtain the hard copy image product; scanning the hard copy image product subsequently by a scanning device and analyzing the digital image so as to obtain the unique ID and accessing the database for obtaining the order informations using the unique ID.

Summary of Invention Paragraph:

[0010] According to still another aspect of the present invention, there is provided a system for printing and automatically forwarding hard copy image products to a designated recipient, comprising an image server having a processor for analyzing a digital image and developing a unique ID with respect to the image based on the analysis; a database connected to the server for storing the unique ID and associated order informations, the order informations including additional information and a designated recipient for receiving the hard copy image product made using the digital image; a first printer

connected to the server for printing the digital image onto a medium to obtain a hard copy image product; a scanner connected to the server for digitally scanning the hard copy image product, the scan data being analyzed by the processor to obtain the unique ID and access the database for obtaining the order informations using the unique ID; and a second printer for printing the additional information for use in forwarding the hard copy image product to the designated recipient.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw. Desc	Ima
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6. Document ID: US 20040085578 A1

L1: Entry 6 of 57

File: PGPB

May 6, 2004

DOCUMENT-IDENTIFIER: US 20040085578 A1

TITLE: Producing personalized photo calendar

Detail Description Paragraph:

[0028] The printing and finishing facility 40 includes network servers 42 for communicating with the data center 30, printers 45 for printing images on physical surfaces, finishing equipment 46 for operations after the images are printed, and shipping stations 48 for confirming the completion of the orders and shipping the ordered photo products to recipients 100 and 105 (the user 70 can be a recipient). The printing and finishing facilities 40,41 can include a film processor 43 for processing exposed films, and a scanner 44 for digitizing a processed film stripe. The network servers 42 are connected with the data center 30 via a computer network 80 such as a Local Area Network or a Wide Area Network. The order information and image data can be transferred from servers 32 to the network servers 42 using a standard or a proprietary protocol (FTP, HTTP, XML, etc.). The finishing equipment 46 can perform any operations for finishing a complete photo product other than photo printing such as cutting, folding, adding a cover to photo book, punching, stapling, gluing, binding, envelope printing and sealing, packaging, labeling, weighing and postage metering. The finishing operations can also include framing a photo print, recording image data on a CD-ROM, etc. Furthermore, the printers and the finishing equipments can be located in different sites. Some of the finishing operations may be fulfilled by contracting an external finishing provider.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw. Desc	Ima
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7. Document ID: US 20040008226 A1

L1: Entry 7 of 57

File: PGPB

Jan 15, 2004

DOCUMENT-IDENTIFIER: US 20040008226 A1

TITLE: Image uploading

Detail Description Paragraph:

[0046] If the user has not dragged and dropped an image over the area, the process 300 allows a user to perform other viewing operations (step 310). Examples of the other viewing operations include creating and editing image files before ordering or shipping physical manifestations of one or more images. The physical manifestation of the digital content may include photographic prints of the one or more digital images, framed photographic prints, photo-album pages bearing one or more digital images, compositions of digital images and other graphical and/or textual content, and/or artifacts bearing a digital image such as a novelty item, a shirt, a coffee mug, a key-chain, a mouse pad, a

magnet, or a deck of playing cards. Optionally, the set of digital content may include graphical and/or textual content, and the physical manifestation of the set of digital content may include a card (e.g., a greeting card, a holiday card, an announcement, a playing card, a post card, a thank you card, or an invitation), an advertisement, a coupon, and/or a bound volume (e.g., a photo-album or a travel book) bearing the graphical and/or textual content. The graphical and/or textual content can include digital images, digitized content, and/or computer-generated content. Other operations include ordering prints associated with all images, or alternatively dividing an order into a plurality of sub-orders so that each sub-order corresponds to a different specified recipient and includes an instance of each digital image associated with the recipient corresponding to the suborder. The order may be specified by receiving interactive input from the viewer.

Detail Description Paragraph:

[0075] After the prints, recipients and respective parameters have been specified, the user's order is fulfilled by making prints of the designated images and distributing them to the specified recipients (step 406). In general, fulfillment can be accomplished either by the photo-finisher itself or by another entity or company in cooperation with the photo-finisher. Potentially, the photo-finisher could have business arrangements with two or more different fulfillment companies, which could be dispersed geographically (at various locations around the country or world) to minimize shipping costs, labor costs and/or delivery time. Alternatively, or in addition, different fulfillment companies could be used which have different areas of expertise or production capability. For example, one fulfillment company could specialize in making standard photographic prints, another fulfillment company could specialize in printing greeting cards, yet another fulfillment company could specialize in generating T-shirts, and so on.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KIMC	Draw. Desc	Ima
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8. Document ID: US 20040001219 A1

L1: Entry 8 of 57

File: PGPB

Jan 1, 2004

DOCUMENT-IDENTIFIER: US 20040001219 A1
TITLE: Personalized photo greeting cards

Summary of Invention Paragraph:

[0010] In a further aspect, a system for producing personalized photo greeting cards, include a) a server for receiving digital images from a user; b) a computer terminal in remote connection with the server for the user to send the digital images and the order information to the server, each order including at least one personalized photo greeting card having one or more digital image provided by the user; and c) a printing and finishing facility for producing the ordered personalized photo greeting cards in batches, including printing batch-separation symbols on at least one personalized photo greeting card in each batch, separating the produced personalized photo greeting cards into batches using the batch-separation symbols, and shipping the personalized photo greeting cards to user-specified recipient.

Detail Description Paragraph:

[0032] The printing and finishing facility 40 includes network servers 42 for communicating with the data center 30, printers 45 for printing images on physical surfaces, finishing equipment 46 for operations after the images are printed, and shipping stations 48 for confirming the completion of the orders and shipping the ordered photo products to recipients 100 and 105 (the user 70 can be a recipient). The printers 45 are digital printers that takes digital data input and produces images on a receiver. Examples of printer 45 include can be digital photographic printers such as Fuji Frontier Minilab printers, Kodak DLS minilab printers, Gretag CYRA FastPrint digital photo printer, or Kodak I-Lab photo printers. The printers 45 can also include offset digital

printers or digital printing presses such as HP Indigo UltraStream 2000 digital printing press, Xerox's DocuColor printers etc. The printers 45 can also include large format photo or inkjet printers for printing posters and banners. The printing and finishing facilities 40,41 can include a film processor 43 for processing exposed films, and a scanner 44 for digitizing a processed film stripe. The network servers 42 are connected with the data center 30 via a computer network 80 such as a Local Area Network or a Wide Area Network. The order information and image data can be transferred from servers 32 to the network servers 42 using a standard or a proprietary protocol (FTP, HTTP, among others). The finishing equipment 46 can perform any operations for finishing a complete photo product other than photo printing such as cutting, folding, adding a cover to photo book, punching, stapling, gluing, binding, envelope printing and sealing, packaging, labeling, weighing and postage metering. The finishing operations can also include framing a photo print, recording image data on a CD-ROM, etc. Furthermore, the printers and the finishing equipments can be located in different sites. Some finishing operations can be fulfilled by an external contractor. More detailed workflow for producing folded greeting cards is illustrated in FIG. 4.

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KIMC](#) | [Drawn Desc](#) | [Ima](#)

9. Document ID: US 20030231340 A1

L1: Entry 9 of 57

File: PGPB

Dec 18, 2003

DOCUMENT-IDENTIFIER: US 20030231340 A1

TITLE: Print order system, printing system, order terminal, and program

Abstract Paragraph:

When an order for printing image data is placed via a network, a wrong agency or a wrong recipient can be prevented from being designated. A print order is placed by sending order information and image data to a DPE store. The order information includes recipient information. An order reception server refers to a table stored in a database for representing an order reception area of the DPE store, and judges whether or not the place of residence of a recipient is within the order reception area, based on the recipient information. If a result of the judgment is negative, the order reception server sends warning information to a user terminal. In this manner, a warning message notifying a user of the fact that the recipient or the DPE store may be wrong is displayed on a monitor.

Summary of Invention Paragraph:

[0014] an order reception server capable of receiving, via a network, image data and order information representing the content of a print order regarding the image data and including recipient information representing a place of residence of a recipient of printed matter to be generated according to the content of the print order and/or agency information representing an agency at which the printed matter is received; and

Summary of Invention Paragraph:

[0035] A printing system of the present invention is a printing system comprising an order reception server capable of receiving order information generated by an order terminal for placing a print order regarding image data via a network. The order information includes the content of the print order regarding the image data, in addition to recipient information representing a place of residence of a recipient of printed matter to be generated according to the content of the print order, and/or agency information representing an agency at which the printed matter is received. The printing system is characterized in that the order reception server judges whether or not the place of residence of the recipient is within an order reception area of the agency, based on the recipient information, and sends warning information to the order terminal in the case where the place of residence is not within the order reception area.

Detail Description Paragraph:

[0073] Whether or not the Confirm button 16D has been clicked is then judged (Step S11). If a result at Step S11 is affirmative, the order information C representing the content of the print order is sent to the order reception server 21 of the DPE store 2, together with the image data sets S to be printed (Step S12). The order information C includes the file names of the image data sets S, the print sizes, the print quantities, the information on the user 1 (such as the name, the address, and the phone number), and the recipient table. The order reception server 21 receives the order information C and the image data S (Step S13), and carries out recipient confirmation process (Step S14).

CLAIMS:

1. A print order system comprising: an order reception server capable of receiving, via a network, image data and order information representing the content of a print order regarding the image data and including recipient information representing a place of residence of a recipient of printed matter to be generated according to the content of the print order and/or agency information representing an agency at which the printed matter is received; and an order terminal connected to the order reception server via the network and used for placing the print order regarding the image data by generating the order information and then by sending the order information through an access to the order reception server, wherein the order reception server has functions of judging whether or not the place of residence of the recipient is within an order reception area of the agency, based on the recipient information, and sending warning information to the order terminal in the case where the place of residence has been judged to be not within the order reception area, and the order terminal has a function of issuing a warning based on the warning information.

3. A printing system comprising an order reception server capable of receiving order information generated by an order terminal for placing a print order regarding image data via a network, the order information including the content of the print order regarding the image data in addition to recipient information representing a place of residence of a recipient of printed matter to be generated according to the content of the print order and/or agency information representing an agency at which the printed matter is received, wherein the order reception server has functions of judging whether or not the place of residence of the recipient is within an order reception area of the agency, based on the recipient information, and sending warning information to the order terminal in the case where the place of residence has been judged to be not within the order reception area.

7. A program that causes a computer to execute a procedure carried out in a printing system comprising an order reception server capable of receiving order information generated by an order terminal for placing a print order regarding image data via a network, the order information including the content of the print order regarding the image data in addition to recipient information representing a place of residence of a recipient of printed matter to be generated according to the content of the print order and/or agency information representing an agency at which the printed matter is received, the program comprising the steps of: judging whether or not the place of residence of the recipient is within an order reception area of the agency, based on the recipient information, and sending warning information to the order terminal in the case where the place of residence has been judged to be not within the order reception area.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Ima
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10. Document ID: US 20030229667 A1

L1: Entry 10 of 57

File: PGPB

Dec 11, 2003

DOCUMENT-IDENTIFIER: US 20030229667 A1

TITLE: System, computer product and method for delivering pictures electronically

Detail Description Paragraph:

[0062] For example, in the case of the first embodiment, when an order is placed by a recipient, including the customer, an order is sent in the form of an electronic mail that includes the text about the order (number of prints, identification of the image, and so on). In a particular implementation of this first embodiment, it is contemplated that a computer program is provided that reads the text of the electronic mail that includes the order, and feeds the information to a printer to automate the reprint process.

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Draw Desc](#) | [Ima](#)

11. Document ID: US 20030200153 A1

L1: Entry 11 of 57

File: PGPB

Oct 23, 2003

DOCUMENT-IDENTIFIER: US 20030200153 A1

TITLE: System and method for conveying image assets to a recipient

Summary of Invention Paragraph:

[0001] Over the years, photography has evolved from being primarily dependent on the analog silver halide process to the digital imaging domain. With advancements in digital cameras and electronic communications, photographic image assets can be quickly shared with virtually anyone, anywhere in the world. At the receiving end, the received photographic image assets may be printed in order to enable the recipient share in a rich photographic imaging experience.

Detail Description Paragraph:

[0031] In the event that sending unit 136 conveys representations of the image assets to the recipient by way of communications network 120, receiving unit 132 may additionally receive an order for printing services from recipient 150 via communications network 120. This allows recipient 150 to make image asset selections electronically and convey these selections to the service of FIG. 3.

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Draw Desc](#) | [Ima](#)

12. Document ID: US 20030182210 A1

L1: Entry 12 of 57

File: PGPB

Sep 25, 2003

DOCUMENT-IDENTIFIER: US 20030182210 A1

TITLE: Producing and sharing personalized photo calendar

Detail Description Paragraph:

[0025] The printing and finishing facility 40 includes network servers 42 for communicating with the data center 30, printers 45 for printing images on physical surfaces, finishing equipment 46 for operations after the images are printed, and shipping stations 48 for confirming the completion of the orders and shipping the ordered photo products to recipients 100 and 105 (the user 70 can be a recipient). The printing and finishing facilities 40,41 can include a film processor 43 for processing exposed films, and a scanner 44 for digitizing a processed film stripe. The network servers 42

are connected with the data center 30 via a computer network 80 such as a Local Area Network or a Wide Area Network. The order information and image data can be transferred from servers 32 to the network servers 42 using a standard or a proprietary protocol (FTP, HTTP, XML, etc.). The finishing equipment 46 can perform any operations for finishing a complete photo product other than photo printing such as cutting, folding, adding a cover to photo book, punching, stapling, gluing, binding, envelope printing and sealing, packaging, labeling, weighing and postage metering. The finishing operations can also include framing a photo print, recording image data on a CD-ROM, etc. Furthermore, the printers and the finishing equipments can be located in different sites. Some of the finishing operations may be fulfilled by contracting an external finishing provider.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMPC	Drawn Desc	Ima
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13. Document ID: US 20030177067 A1

L1: Entry 13 of 57

File: PGPB

Sep 18, 2003

DOCUMENT-IDENTIFIER: US 20030177067 A1

TITLE: Systems and methods for ordering and distributing incentive messages

Summary of Invention Paragraph:

[0010] Another aspect of the present invention includes a system for enabling a requestor to order and have delivered to a recipient a customized greeting message having a redemptive code included therewith, the system having means for selecting a graphic image for inclusion in the message, means for specifying customized text for inclusion in the message, means for specifying a payee for the negotiable payment instrument, means for selecting the monetary or other value associated with the redemptive code, means for printing the message and negotiable payment instrument, and means for distributing the message and redemptive code to the recipient.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMPC	Drawn Desc	Ima
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14. Document ID: US 20030161003 A1

L1: Entry 14 of 57

File: PGPB

Aug 28, 2003

DOCUMENT-IDENTIFIER: US 20030161003 A1

TITLE: Image application software providing a list of user selectable tasks

Summary of Invention Paragraph:

[0003] As described in commonly assigned U.S. patent application Ser. No. 08/977,382, filed Nov. 24, 1997 by Kenneth A. Parulski et al., entitled "Electronic Camera With `Utilization` Selection Capability", the disclosure of which is herein incorporated by reference, a digital camera can be used to review images and select images to be printed or emailed to others. The camera creates a control file such as a print order file, which indicates which images are to be printed and how many copies of each image to print, or an email order file, which indicates which image files to email, as well as email addresses of the recipients.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMPC	Drawn Desc	Ima
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15. Document ID: US 20030142215 A1

L1: Entry 15 of 57

File: PGPB

Jul 31, 2003

DOCUMENT-IDENTIFIER: US 20030142215 A1

TITLE: NETWORK CONFIGURATION FILE FOR AUTOMATICALLY TRANSMITTING IMAGES FROM AN ELECTRONIC STILL CAMERA

Detail Description Paragraph:

[0014] The steps used to automatically transmit images using the network configuration file are shown in FIG. 2. After disconnecting the camera from the host PC, the user operates the camera to take pictures (step 50). This is typically done at a remote location, for example while traveling to another city. As the user takes or reviews images on the image LCD display, the decision can be made to transmit one or more images (step 52). This is done by choosing one of the keywords or icons in a menu 54 shown in FIG. 2, which are displayed on the LCD 24 and selected, e.g., through the user buttons 26. (Note that a camera will typically only include a subset (only those desired by the user) of all the different services shown.) The selected image files may be tagged with a code (step 56) indicating which service is requested, as shown in FIG. 3. (Alternately, an "image utilization" file can be created in the camera storing a list of images to be transmitted by a particular method, as described in the cross-referenced copending patent application (U.S. Serial No. 60/037,963). As described in that patent application, the details of an order, e.g., number of print copies to be made from an image and the size of the prints and/or a list of images to be e-mailed to various recipients, is written into the "utilization" file, which identifies the order and includes pointers to the image files that store the images required to "fulfill" the order. The "utilization" file is stored in the internal memory 28 or the memory card 30.) Next, the system determines whether a request exists to send an image (step 58). If no request is present, the image and associated data is stored in either permanent memory 28 or the memory card 30 (step 59). (Typically, all images are initially saved in memory whether eventually sent or not.) Otherwise, if there is a request to send an image, the user ensures that the camera is connected to the appropriate service (wired telephone line, cellular phone, kiosk, etc.) and pushes a "send" button in the user button section 26, or selects a "send" menu option on the LCD 24. The camera then utilizes the appropriate network configuration file, shown in FIG. 4. Each network configuration file contains items such as the protocol type, phone number, etc., as described in Appendix I. The user password may be checked against the password in the network configuration file to ensure that the user is authorized to connect the camera to the desired service (step 60). Alternately, the stored password in the appropriate configuration file can be used. Next, the camera uses the parameters in the configuration file to establish communications with the service and send one or more image files as selected by the user (steps 62). The service receiver interprets the system commands issued by the camera from the network configuration file list and sends appropriate feedback (such as "transfer in progress" and "transfer complete") which are interpreted by the camera and displayed on the LCD 24 (steps 64).

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KM/C	Draw Desc	Ima
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 16. Document ID: US 20030113038 A1

L1: Entry 16 of 57

File: PGPB

Jun 19, 2003

DOCUMENT-IDENTIFIER: US 20030113038 A1

TITLE: System and method for dynamically generating on-demand digital images

Summary of Invention Paragraph:

[0013] The system and method can be utilized in a number of different applications. For example, the system and method can be utilized to create advertisements (visual or audible) targeted for a specific recipient, utilizing information about that recipient to drive the creation or modification of the advertisement in such areas as: Internet radio advertising and building on-the-fly audio streams; Interactive TV and building on-the-fly commercials on a per viewer basis; direct marketing print advertising; and direct marketing HTML email advertising wherein an e-mail sent to a recipient includes images related to product advertisements and allows the customer to dynamically alter the images in order to customize the product being purchased. The type of information known about the recipient can be specific (such as favorite ice cream, current salary, etc.), but may also be as simple as what time zone the recipient is in or what time are they viewing the advertisement.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Ima
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 17. Document ID: US 20030050985 A1

L1: Entry 17 of 57

File: PGPB

Mar 13, 2003

DOCUMENT-IDENTIFIER: US 20030050985 A1

TITLE: Mail system, mail server and program product for mail server

CLAIMS:

9. The program product according to claim 7, wherein said step of setting a sequential order for the relaying devices preferably includes a step of (i) determining whether the image processing devices includes a printing device, and (ii) setting the printing device as the final recipient.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Ima
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 18. Document ID: US 20030036956 A1

L1: Entry 18 of 57

File: PGPB

Feb 20, 2003

DOCUMENT-IDENTIFIER: US 20030036956 A1

TITLE: Systems and methods for ordering and distributing incentive messages

Summary of Invention Paragraph:

[0013] Another aspect of the present invention includes a system for enabling a requestor to order and have delivered to a recipient a customized greeting message having a negotiable payment instrument included therewith, the system having means for selecting a graphic image for inclusion in the message, means for specifying customized text for inclusion in the message, means for specifying a payee for the negotiable payment instrument, means for selecting the monetary value of the negotiable payment instrument, means for printing the message and negotiable payment instrument, and means for mailing the message and negotiable payment instrument to the recipient.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Ima
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19. Document ID: US 20020191223 A1

L1: Entry 19 of 57

File: PGPB

Dec 19, 2002

DOCUMENT-IDENTIFIER: US 20020191223 A1

TITLE: Image processing apparatus, information communication method, program and information communication system

Detail Description Paragraph:

[0063] On the other hand, where it is determined in step S09 that facsimile (FAX) transmission mode is designated as the transmission mode shown in the header information, the header information in the received e-mail 4 is converted into sender print data, and resolution conversion, compression method conversion and other processes are performed to the image data 5. The image processing apparatus 1 then advances to step S12, in which it connects to the telephone line, and sends the sender print data and the image data to the recipient facsimile machine in that order (step S13). An example of the result of this facsimile transmission is shown in FIG. 6.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Ima
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20. Document ID: US 20020103711 A1

L1: Entry 20 of 57

File: PGPB

Aug 1, 2002

DOCUMENT-IDENTIFIER: US 20020103711 A1

TITLE: Online method and system for ordering and having delivered a paper greeting message and payment instrument

Summary of Invention Paragraph:

[0012] Another aspect of the present invention includes a system for enabling a sender to order and have delivered to a recipient a customized greeting message having a negotiable payment instrument included therewith, the system having means for selecting a graphic image for inclusion in the message, means for specifying customized text for inclusion in the message, means for specifying a payee for the negotiable payment instrument, means for selecting the monetary value of the negotiable payment instrument, means for printing the message and negotiable payment instrument, and means for mailing the message and negotiable payment instrument to the recipient.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Ima
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21. Document ID: US 20020071678 A1

L1: Entry 21 of 57

File: PGPB

Jun 13, 2002

DOCUMENT-IDENTIFIER: US 20020071678 A1

TITLE: Method of processsing a roll of exposed photographic film containing photographic images into corresponding digital images and then distributing visual prints produced

from the digital images

Detail Description Paragraph:

[0057] The index print 8a is then sent to the desired recipient 8b along with instructions for ordering photographic merchandise based on the delivered images. In a preferred embodiment, a toll-free number is provided, which the recipient 8b can immediately call 8c and place an order for a visual print based on any printed photograph in the index print. In an alternate embodiment, an order form can be included with index print, which the recipient can fill out and return to place an order 8d. For the toll-free telephone number, the order may be placed with a human operator or an automated response system 8e of a type commercially available. A human operator may utilize an interface similar to the HTML interface previously described above. However, the operator accesses the digital images on the server 16 using the unique access code provided by the caller. Otherwise, the types of screens, items to order and information collected are similar to the HTML interface previously described.

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Draw Desc](#) | [Ima](#)

22. Document ID: US 20020065741 A1

L1: Entry 22 of 57

File: PGPB

May 30, 2002

DOCUMENT-IDENTIFIER: US 20020065741 A1

TITLE: Distributing images to multiple recipients

Abstract Paragraph:

A computer-implemented method of distributing cards to a plurality of recipients, the method including receiving a card order specifying a plurality of recipients and, for each specified recipient, a set of one or more uploaded images associated with that recipient; for each of the plurality of recipients specified in the received card order, printing at least one card having at least one uploaded image from the recipient's image set; and distributing the printed cards having the recipients' uploaded images to their respective associated recipients.

Summary of Invention Paragraph:

[0012] The present inventors recognized that it would be advantageous to provide users with a intuitive and robust environment in which a user can order image prints to be distributed to multiple recipients while minimizing the user's time, effort, and expense in placing the order.

Summary of Invention Paragraph:

[0014] In one aspect, a computer-implemented method of distributing image prints to a plurality of recipients (including, e.g., an individual, a business entity, and/or an address) may include receiving an order specifying a plurality of recipients (e.g., where at least one of the specified recipients is different from a user from whom the order was received) and, for each specified recipient, a set of one or more images associated with that recipient. The method also may include, for each of the plurality of recipients specified in the received order, printing at least one copy of each image in the recipient's image set and distributing the printed image copies to their respective associated recipients.

Summary of Invention Paragraph:

[0017] The method also may include, prior to printing, dividing the received order into a plurality of sub-orders, each sub-order corresponding to a different recipient. The received order may be divided into the plurality of sub-orders, for example, by instantiating, for each image in the received order, a copy of the image (e.g., a digital image file) for each recipient designated to receive a print of that image. Printing, for

example, may include printing a set of one or more images in each sub-order and/or printing a run of prints associated with a specified recipient for each sub-order. Furthermore, the method may include printing a destination identifier, which may identify the specified recipient for a corresponding run of prints and/or delimit a corresponding sub-order. The destination identifier may include one or more of the following items: a shipping address, a recipient's name, an index of thumbnail images, a bar code, a textual message and/or print re-ordering information. Moreover, a first image in a sub-order may have one or more print parameters that differ from one or more print parameters of a second image in the sub-order. In addition, dividing the received order into the plurality of sub-orders may be performed by a first entity (e.g., a photo-finishing enterprise) and printing the sub-orders may be performed by a second entity (e.g., a goods/service provider enterprise such as a supermarket, a drugstore, a post office, or an online grocer). Distributing the printed image copies further may include delivering a recipient's printed image copies along with an unrelated order of goods/services associated with that recipient.

Summary of Invention Paragraph:

[0020] In another aspect, a computer-implemented method of distributing photographic prints to a plurality of recipients may include receiving an order specifying (i) a plurality of recipients, (ii) for each specified recipient, a set of one or more digital images associated with that recipient, and (iii) for each digital image, a set of one or more print parameters (e.g., print size, number of copies, print finish, and/or a textual message). The method also may include dividing the received order into a plurality of sub-orders so that each sub-order corresponds to a different specified recipient and includes an instance of each digital image associated with the recipient corresponding to the sub-order. The method further may include printing the instantiated digital images in each of the sub-orders according to the print parameters associated with each image, and distributing the prints to their respective associated recipients. The order may be received by receiving interactive input from a user of a computer system (e.g., the user's personal computer system or a public entry terminal).

Summary of Invention Paragraph:

[0022] The method further may include printing a destination identifier that identifies the specified recipient for a corresponding sub-order. The destination identifier may delimit a corresponding sub-order and/or may include one or more of the following items: a shipping address, a recipient's name, an index of thumbnail images, a bar code, a textual message and/or print re-ordering information. Furthermore, a first image in a sub-order may have print parameters that differ from print parameters of a second image in the sub-order.

Summary of Invention Paragraph:

[0026] In another aspect, a print distribution system may include a front-end computer sub-system for receiving an order specifying a plurality of recipients (including, e.g., an individual, a business entity, and/or an address) and, for each specified recipient, a set of one or more images associated with that recipient. The system also may include a printing sub-system for printing at least one copy of each image in each recipient's image set, and a distribution sub-system for distributing the printed image copies to their respective associated recipients. At least one of the specified recipients may be different from a user from whom the order was received.

Summary of Invention Paragraph:

[0029] Optionally, the printing sub-system may include a sub-system for dividing the received order into a plurality of sub-orders so that each sub-order corresponds to a different recipient. The printing sub-system may print a set of one or more images in each sub-order and/or may print a run of prints associated with a specified recipient for each sub-order. The printing sub-system also may print a destination identifier that identifies the specified recipient for a corresponding run of prints. The destination identifier may delimit a corresponding sub-order and/or may include one or more of the following items: a shipping address, a recipient's name, a thumbnail image index, a bar code, a textual message and/or print re-ordering information.

Summary of Invention Paragraph:

[0030] Dividing the received order into the plurality of sub-orders may include

instantiating, for each image in the received order, a copy of the image for each recipient designated to receive a print of that image. An instantiated copy may include a digital image file. Moreover, dividing the received order into the plurality of sub-orders may be performed by a first entity (e.g., a photo-finishing enterprise) and printing the sub-orders may be performed by a second entity (e.g., a goods/service provider enterprise such as a supermarket, a drugstore, a post office, or an online grocer). Distributing the printed image copies may include delivering a recipient's printed image copies along with an unrelated order of goods/services associated with that recipient.

Summary of Invention Paragraph:

[0032] In another aspect, a method of facilitating print re-orders includes receiving an order specifying a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient. The method also may include, for each of the plurality of recipients specified in the received order, printing at least one copy of each image in the recipient's image set and printing a re-order number on a back of each image copy. The re-order number may uniquely identify the image, the recipient of that image, and/or the originator of that image. The method also may include distributing the printed image copies to their respective associated recipients, receiving input (e.g., using an automatic voice or touchtone response system) from a recipient specifying a print re-order number and/or one or more print parameters associated with the print re-order, generating a print of the image associated with the print re-order number, and sending the print to the recipient associated with the print re-order number. Furthermore, the order may include a single transaction sequence such as a single charge to a financial instrument (e.g., a credit card, a debit card, electronic funds transfer, a gift certificate, or a coupon) that may be terminated by a click of an "order" button.

Summary of Invention Paragraph:

[0033] In another aspect, a computer-implemented method of distributing image prints to a plurality of recipients may include receiving, at a facility corresponding to a first entity (e.g., a photo-finishing enterprise), an order specifying a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient. The method also may include communicating the received order to a facility corresponding to a second entity (e.g., a goods/service provider enterprise such as a supermarket, a drugstore, a post office, or an online grocer). The method further may include, at the second entity's facility, for each of the plurality of recipients specified in the received order, printing at least one copy of each image in the recipient's image set, and distributing the printed image copies to their respective associated recipients. Distributing the printed image copies may include delivering a recipient's printed image copies along with an unrelated order of goods/services associated with that recipient.

Summary of Invention Paragraph:

[0034] Furthermore, prior to communicating the received order to the facility corresponding to the second entity, the first entity may divide the received order into a plurality of sub-orders so that each sub-order corresponds to a different recipient. Printing may include printing a set of one or more images in each sub-order and/or printing, for each sub-order, a run of prints associated with a specified recipient. Also, a destination identifier that identifies the specified recipient for a corresponding run of prints may be printed. The destination identifier may delimit a corresponding sub-order and/or may include one or more of the following items: a shipping address, a recipient's name, a thumbnail image index, a bar code, a textual message and/or print re-ordering information.

Summary of Invention Paragraph:

[0035] In another aspect, a computer-implemented method of distributing image prints to a plurality of recipients may include receiving an order from a user at a public entry terminal (e.g., a digital drop box, a point-of-sale station, or a kiosk), the order specifying a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient. The method also may include transmitting the received order from the public entry terminal to a photo-finishing facility. The method further may include printing, for each of the plurality of recipients specified in the received order, at the photo-finishing facility at least one copy of each image in the

recipient's image set and distributing the printed image copies to their respective associated recipients.

Summary of Invention Paragraph:

[0037] In another aspect, a computer-implemented method of ordering image prints for a plurality of recipients may include receiving at a host system an order from a client system, where the order includes a single transaction sequence and specifies a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient. The method further may include, at the host system, dividing the received order into a plurality of sub-orders, where each sub-order corresponds to a different recipient. The method also may include printing a set of one or more images in each sub-order and/or printing, for each sub-order, a run of prints associated with a specified recipient. Moreover, the method may include printing a destination identifier that identifies the specified recipient for a corresponding run of prints. The destination identifier may delimit a corresponding sub-order and/or may include one or more of the following items: a shipping address, a recipient's name, a thumbnail image index, a bar code, a textual message and/or print re-ordering information.

Summary of Invention Paragraph:

[0039] Moreover, dividing the received order into the plurality of sub-orders may include, for each image in the received order, instantiating a copy of the image for each recipient designated to receive a print of that image. An instantiated copy may include a digital image file.

Summary of Invention Paragraph:

[0042] One or more of the following advantages may be provided. The systems and techniques described here provide intuitive and convenient mechanisms that allow a user to order prints of images and have the prints distributed to multiple recipients at different locations with a minimum of time, trouble and expense on the part of the ordering user. For example, in a single ordering sequence, a user can specify a set of one or more prints and have them distributed to multiple different recipients. As a result, the user need not reenter redundant information--for example, identifying the images to be printed, supplying payment information, and the like--as otherwise would be required if the print order was limited to a single shipping destination. Moreover, by allowing a user to specify multiple recipients within a single print order, the user is not subjected to a minimum dollar amount for each of several different orders. Rather, because multiple recipients are allowed, the user is better able to satisfy the minimum dollar amount without being forced to order more prints than otherwise would be desired.

Summary of Invention Paragraph:

[0045] In addition, by employing a non-linear workflow model certain benefits and efficiencies are realized. More particularly, by taking a single multiple-recipient order, breaking it down into sub-orders corresponding to a single recipient, selectively instantiating and re-organizing multiple instances of designated images to build each sub-order, and then printing each sub-order as a separate run of prints for the associated recipient, a single print order (transaction sequence) can be used to order prints to be generated and distributed to multiple recipients. Moreover, such a non-linear workflow tends to increase the efficiency and/or speed of the print generation and distribution tasks dramatically.

Detail Description Paragraph:

[0059] FIG. 3A is a block diagram of one deployment of a print generation and distribution system 300. In general, the system of FIG. 3A enables users to transmit images to a photo-finisher and then order prints of those images to be sent to one or more recipients. In FIG. 3A, one or more customers 302-304 communicate with the system 300 over a wide area network 310 such as the Internet. In one embodiment, the system 300 stores digital images that have been submitted by the customers 302-304 over the Internet for subsequent printing and delivery to designated recipients.

Detail Description Paragraph:

[0062] In general, this process of instantiating multiple image instances and re-ordering those instances as appropriate to build sub-orders represents a non-linear workflow model which, among other advantages, enables a user, through a single print order (delimited,

for example, by a single transaction sequence and/or a single credit or debit card charge), to specify multiple different recipients, each of whom can receive his or her own personalized set of prints in which each can be generated according to customizable parameters (e.g., size, number of copies, finish, personal message, etc.). In addition, the non-linear workflow can cause a dramatic increase in the efficiency and/or speed with which prints can be generated and distributed to one or more recipients.

Detail Description Paragraph:

[0063] FIG. 3B illustrates an example of a non-linear workflow in which sub-orders are generated from a print order specifying multiple recipients. In this example, assume that a user places an order 352 for prints (for example, by creating associations between images and recipients) identifying three different recipients A, B, and C, each of who is to receive a set of prints selected from images 1-10. In this example, assume that Recipient A is to receive prints of Images 1, 2, 4 and 8 (Recipient A's image associations are indicated by solid lines), Recipient B is to receive prints of images 1, 7 and 9 (Recipient B's image associations are indicated by dashed lines) and Recipient C is to receive prints of Images 1, 2 and 7 (Recipient C's image associations are indicated by dotted lines). The images 1, 2, 4, 7, 8, and 9 in print order 352 are then instantiated and re-organized as appropriate to generate, or build, three separate sub-orders 354, 356, 358--one for each of the three different recipients A, B, C, respectively. Each of these sub-orders in turn is sent to the printing system to generate a contiguous run of prints for the associated recipient.

Detail Description Paragraph:

[0064] According to this example, Image 1 would be instantiated three times, once for each of the three different print sub-orders 354, 356, and 358 in which it is included (that is, each of Recipients A, B, and C is to receive a print of Image 1). Similarly, Image 2 would be instantiated twice (one instance for Recipient A's sub-order 354 and another instance for Recipient C's sub-order 358), as would Image 7 (one instance for Recipient B's sub-order 356 and another instance for Recipient C's sub-order 358). Each of the remaining images (4, 8 and 9) would be instantiated only once because in each case the image is being printed for, and sent to, only a single recipient (equivalently, is part of a single sub-order). As the images are instantiated according to the various sub-orders for which they are required, the image instances are inserted into a sub-order sequence, which when completely built, can be sent to the printer to generate a corresponding run of prints.

Detail Description Paragraph:

[0067] FIG. 4 is a flowchart of a process that allows a user to transmit images to a photo-finisher and then order prints of those images to be sent to one or more recipients. In general, the print generation and multi-recipient distribution process of FIG. 4 is oriented to an image, or set of images, of which a user desires to distribute prints to a group of one or more recipients. That is, a user's print order is delimited by a set of images selected by the user and not by the number or location of recipients to receive the prints.

Detail Description Paragraph:

[0072] For example, a public entry terminal placed at a drug store could have a slot that accepts removable storage media, such as a FLASH memory chip, and reads image files from an inserted storage medium. Alternatively, or in addition, the public terminal could include one or more data ports (e.g., a USB or SCSI port) through which users could upload images to the public terminal directly from their digital cameras. The uploaded image files could be displayed on a monitor to the user, who could then select images of which prints are desired, specify print parameters, and designate recipients for the prints. In addition, the public entry terminal could include application software or utilities that allow users to edit images as desired, for example, to resize or crop images, to change an image's orientation, to remove redeye, to modify the color characteristics, etc. In any event, after the user had uploaded his or her images and has specified the images to be printed and the intended recipients, the public entry terminal could formulate a corresponding order and forward it on the photo-finisher's host system to initiate fulfillment.

Detail Description Paragraph:

[0075] In addition to hosting the user's images on a web page, the photo-finisher also can store the images in an archive (e.g., a database management system (DBMS)) so that the user, and/or others given authorization by the user, can access them at any time in the future. Such access might be desired to order additional prints or simply to be able to share an online photo album among specified users. With regard to the former (ordering additional prints), each print could be encoded on its back or front with a print re-order number that uniquely identifies the print, the image used to create the print, the particular recipient of the print, and/or the originator of the print/image. Such a print re-order number could be used by a print recipient to order additional copies of the print, for example, over the Internet by visiting a URL specified on the received print. As another example, by maintaining an automatic voice and/or touchtone response system at the photofinisher's facility, a print recipient could call a toll-free telephone number (also potentially printed on the print) associated with the automatic response system and punch in (or speak) the unique re-order number for the print of which an additional copy is desired. Optionally, the user also could key in appropriate information using the telephone keypad to specify parameters for the re-ordered print or image (e.g., size, number of copies, finish). If no such optional parameters were entered by the recipient, a default condition could be to use the parameters of the original print copy received by that recipient. In any event, the automatic response system could use the entered unique re-order number to generate an order for the particular print identified by the re-order number and then have the print delivered to the recipient identified by the re-order number.

Detail Description Paragraph:

[0078] After the prints, recipients and respective parameters have been specified, the user's order is fulfilled by making prints of the designated images and distributing them to the specified recipients (step 406). In general, fulfillment can be accomplished either by the photo-finisher itself or by another entity or company in cooperation with the photo-finisher. Potentially, the photo-finisher could have business arrangements with two or more different fulfillment companies, which could be dispersed geographically (at various locations around the country or world) to minimize shipping costs, labor costs and/or delivery time. Alternatively, or in addition, different fulfillment companies could be used which have different areas of expertise or production ability. For example, one fulfillment company could specialize in making standard photographic prints, another fulfillment company could specialize in printing greeting cards, yet another fulfillment company could specialize in generating T-shirts, and so on.

Detail Description Paragraph:

[0090] To accomplish the former distribution task (sending prints of the digital image to the specified recipients), the image-alias association(s) specified by the user could be used to generate orders that are sent to a fulfillment enterprise that would be responsible for generating a print of the image and shipping a copy to each of the recipients represented by the selected distribution alias. The fulfillment enterprise either could be associated with a company that takes orders for image prints, or the fulfillment enterprise could be implemented as one or more independent organizations. As an example, the fulfillment enterprise could be a production facility that produces photographic prints from digital images and then sends the prints (using, for example, a postal or courier service) to the specified recipients. In this example, the front-end image ordering software would transmit electronically to the fulfillment enterprise various information, e.g., identifying the digital images to be printed, parameters for each digital print to be made (e.g., size, finish, number of copies, personal message, etc.), address information for each of the recipients, payment information, and the like, and then the fulfillment enterprise would utilize this information in fulfilling the order.

Detail Description Paragraph:

[0092] The GUI of FIG. 5 represents only one of several alternative mechanisms or interfaces through which users could designate intended recipients of prints. For example, a standard address book metaphor, such as found in certain e-mail applications or personal information manager (PIM) programs, could be used to designate recipients. To do so, the user would select one or more recipients from among the user's address book entries and then specify which images should be printed and distributed to that user or those users. Or the process could proceed in the opposite order--the user could first

specify images to be printed and then select one or more recipients from the user's address book. Alternatively, or in addition, the user could simply type in the contact information, for example, using a text entry form or command-line interface, to designate print recipients. Virtually any other mechanism or technique for identifying recipients could be used instead or in addition. For example, the user could access one of the several directory services available on the Internet (e.g., Bigfoot at <http://www.bigfoot.com>) to locate, identify and/or select print recipients.

Detail Description Paragraph:

[0103] FIG. 8 is a flowchart of a process for designating recipients of image print copies and delivering the copies to the designated recipients. In general, the steps of designating recipients and specifying images to be printed can be performed in any order. For example, the recipients can be designated first and then the images to be printed can be specified, or vice versa. Moreover, these steps can be repeated and interleaved as desired in a single print ordering sequence. Furthermore, a print ordering sequence need not use distribution aliases or graphical association techniques, but rather can employ any other mechanisms or tools for specifying recipients and images to be printed. Accordingly, the process depicted in FIG. 8 illustrates merely one example of a typical print ordering sequence. Virtually any other sequence or order of steps that achieve substantially the same or a sufficiently similar result could be used instead.

Detail Description Paragraph:

[0108] In one embodiment, the fulfillment enterprise fulfills the print orders by printing, generally in succession, a "run" of prints for each intended recipient (i.e., prints of the images designated for that user). Each run--that is, each batch of prints destined for a different recipient--is separated from adjacent runs by a destination identifier that can be generated by the same equipment and processes as the actual image prints. FIG. 9 shows an example of a destination identifier 900 that includes several items of information including a message 902, potentially including text specified by the user who ordered the prints (Jane Smith); a thumbnail image index 903 including thumbnail images 509, 511, 513, and 516-518 corresponding to the prints sent to this recipient (Joe Smith); reordering information 908; a bar code 910 (encoding, for example, shipping or billing information and/or manufacturing process information used to maintain quality control during print generation); and an address field 904 displaying the recipient's address.

CLAIMS:

1. A computer-implemented method of distributing cards to a plurality of recipients, the method comprising: receiving a card order specifying a plurality of recipients and, for each specified recipient, a set of one or more uploaded images associated with that recipient; for each of the plurality of recipients specified in the received card order, printing at least one card having at least one uploaded image from the recipient's image set; and distributing the printed cards having the recipients' uploaded images to their respective associated recipients.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KM/C	Drawn Desc	Image
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23. Document ID: US 20020054768 A1

L1: Entry 23 of 57

File: PGPB

May 9, 2002

DOCUMENT-IDENTIFIER: US 20020054768 A1

TITLE: Method of processing a roll of exposed photographic film containing photographic images into corresponding digital images and then distributing visual prints produced from the digital images

Detail Description Paragraph:

[0045] The index print is then sent to the desired recipient along with instructions for ordering photographic merchandise based on the delivered images. In a preferred embodiment, a toll-free number is provided, which the recipient can immediately call and place an order for a visual print based on any printed photograph in the index print. In an alternate embodiment, an order form can be included with the index print, which the recipient can fill out and return to place an order. For the toll-free telephone number, the order may be placed with a human operator or an automated response system of a type commercially available. A human operator may utilize an interface similar to the HTML interface previously described above. However, the operator accesses the digital images on the image server 16 using the unique access code provided by the caller. Otherwise, the types of screens, items to order and information collected are similar to the HTML interface previously described.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Ima
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 24. Document ID: US 20020054765 A1

L1: Entry 24 of 57

File: PGPB

May 9, 2002

DOCUMENT-IDENTIFIER: US 20020054765 A1

TITLE: Method of processing a roll of exposed photographic film containing photographic images into corresponding digital images and then distributing visual prints produced from the digital images

Detail Description Paragraph:

[0055] The index print 8a is then sent to the desired recipient 8b along with instructions for ordering photographic merchandise based on the delivered images. In a preferred embodiment, a toll-free number is provided, which the recipient 8b can immediately call 8c and place an order for a visual print based on any printed photograph in the index print. In an alternate embodiment, an order form can be included with index print, which the recipient can fill out and return to place an order 8d. For the toll-free telephone number, the order may be placed with a human operator or an automated response system 8e of a type commercially available. A human operator may utilize an interface similar to the HTML interface previously described above. However, the operator accesses the digital images on the server 16 using the unique access code provided by the caller. Otherwise, the types of screens, items to order and information collected are similar to the HTML interface previously described.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Ima
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 25. Document ID: US 20020054331 A1

L1: Entry 25 of 57

File: PGPB

May 9, 2002

DOCUMENT-IDENTIFIER: US 20020054331 A1

TITLE: Method for remote printing and sending cards and a system for the same

Detail Description Paragraph:

[0031] A sender or person sending a message card or postcard (i.e., the person ordering that a card be sent) uses one of photo terminals 1 through 3 to send an image to be printed on the card as well as text data, including the name and address of a recipient,

the sender's name and address, and the sender's message to computer network 4. Sender thereby requests the print shop to remotely create and send a card with the transmitted photo and text on it.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KM/C	Drawn Desc	Image
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26. Document ID: US 20010022618 A1

L1: Entry 26 of 57

File: PGPB

Sep 20, 2001

DOCUMENT-IDENTIFIER: US 20010022618 A1

TITLE: Network configuration file for automatically transmitting images from an electronic still camera

Detail Description Paragraph:

[0014] The steps used to automatically transmit images using the network configuration file are shown in FIG. 2. After disconnecting the camera from the host PC, the user operates the camera to take pictures (step 50). This is typically done at a remote location, for example while traveling to another city. As the user takes or reviews images on the image LCD display, the decision can be made to transmit one or more images (step 52). This is done by choosing one of the keywords or icons in a menu 54 shown in FIG. 2, which are displayed on the LCD 24 and selected, e.g., through the user buttons 26. (Note that a camera will typically only include a subset (only those desired by the user) of all the different services shown.) The selected image files may be tagged with a code (step 56) indicating which service is requested, as shown in FIG. 3. (Alternately, an "image utilization" file can be created in the camera storing a list of images to be transmitted by a particular method, as described in the cross-referenced copending patent application (U.S. Ser. No. 60/037,963). As described in that patent application, the details of an order, e.g., number of print copies to be made from an image and the size of the prints and/or a list of images to be e-mailed to various recipients, is written into the "utilization" file, which identifies the order and includes pointers to the image files that store the images required to "fulfill" the order. The "utilization" file is stored in the internal memory 28 or the memory card 30.)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KM/C	Drawn Desc	Image
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27. Document ID: US 20010010543 A1

L1: Entry 27 of 57

File: PGPB

Aug 2, 2001

DOCUMENT-IDENTIFIER: US 20010010543 A1

TITLE: Network configuration file for automatically transmitting images from an electronic still camera

Detail Description Paragraph:

[0014] The steps used to automatically transmit images using the network configuration file are shown in FIG. 2. After disconnecting the camera from the host PC, the user operates the camera to take pictures (step 50). This is typically done at a remote location, for example while traveling to another city. As the user takes or reviews images on the image LCD display, the decision can be made to transmit one or more images (step 52). This is done by choosing one of the keywords or icons in a menu 54 shown in FIG. 2, which are displayed on the LCD 24 and selected, e.g., through the user buttons 26. (Note that a camera will typically only include a subset (only those desired by the

user) of all the different services shown.) The selected image files may be tagged with a code (step 56) indicating which service is requested, as shown in FIG. 3. (Alternately, an "image utilization" file can be created in the camera storing a list of images to be transmitted by a particular method, as described in the cross-referenced copending patent application (U.S. Ser. No. 60/037,963). As described in that patent application, the details of an order, e.g., number of print copies to be made from an image and the size of the prints and/or a list of images to be e-mailed to various recipients, is written into the "utilization" file, which identifies the order and includes pointers to the image files that store the images required to "fulfill" the order. The "utilization" file is stored in the internal memory 28 or the memory card 30.)

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Draw. Desc](#) | [Ima](#)

28. Document ID: US 6678036 B2

L1: Entry 28 of 57

File: USPT

Jan 13, 2004

DOCUMENT-IDENTIFIER: US 6678036 B2

TITLE: Method of processing a roll of exposed photographic film containing photographic images into corresponding digital images and then distributing visual prints produced from the digital images

Detailed Description Text (31):

The index print 8a is then sent to the desired recipient 8b along with instructions for ordering photographic merchandise based on the delivered images. In a preferred embodiment, a toll-free number is provided, which the recipient 8b can immediately call 8c and place an order for a visual print based on any printed photograph in the index print. In an alternate embodiment, an order form can be included with index print, which the recipient can fill out and return to place an order 8d. For the toll-free telephone number, the order may be placed with a human operator or an automated response system 8e of a type commercially available. A human operator may utilize an interface similar to the HTML interface previously described above. However, the operator accesses the digital images on the server 16 using the unique access code provided by the caller. Otherwise, the types of screens, items to order and information collected are similar to the HTML interface previously described.

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Draw. Desc](#) | [Ima](#)

29. Document ID: US 6665083 B1

L1: Entry 29 of 57

File: USPT

Dec 16, 2003

DOCUMENT-IDENTIFIER: US 6665083 B1

TITLE: Computer-readable recording medium for recording photograph print ordering information

Detailed Description Text (7):

FIG. 2 shows the structure of an order file used in the present invention. As shown in FIG. 2, ordering information of the present invention to be recorded in a recording medium has the form of a structured storage file wherein a stream showing an object class identifier (CLSID), property information of an order file, and information regarding an orderer, as well as a storage storing specific information regarding the order exists under a root storage. The storage comprises one order storage for one order, and each

order storage comprises an order content stream describing the quantity, the size or the like of print, a recipient stream describing information regarding a recipient of the print, and a link information stream to image data to be printed, for example.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Ima
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30. Document ID: US 6657702 B1

L1: Entry 30 of 57

File: USPT

Dec 2, 2003

DOCUMENT-IDENTIFIER: US 6657702 B1

TITLE: Facilitating photographic print re-ordering

Brief Summary Text (13):

The present inventors recognized that it would be advantageous to provide users with a intuitive and robust environment in which a user can order image prints to be distributed to multiple recipients while minimizing the user's time, effort, and expense in placing the order.

Brief Summary Text (16):

In one aspect, a computer-implemented method of distributing image prints to a plurality of recipients (including, e.g., an individual, a business entity, and/or an address) may include receiving an order specifying a plurality of recipients (e.g., where at least one of the specified recipients is different from a user from whom the order was received) and, for each specified recipient, a set of one or more images associated with that recipient. The method also may include, for each of the plurality of recipients specified in the received order, printing at least one copy of each image in the recipient's image set and distributing the printed image copies to their respective associated recipients.

Brief Summary Text (19):

The method also may include, prior to printing, dividing the received order into a plurality of sub-orders, each sub-order corresponding to a different recipient. The received order may be divided into the plurality of sub-orders, for example, by instantiating, for each image in the received order, a copy of the image (e.g., a digital image file) for each recipient designated to receive a print of that image. Printing, for example, may include printing a set of one or more images in each sub-order and/or printing a run of prints associated with a specified recipient for each sub-order. Furthermore, the method may include printing a destination identifier, which may identify the specified recipient for a corresponding run of prints and/or delimit a corresponding sub-order. The destination identifier may include one or more of the following items: a shipping address, a recipient's name, an index of thumbnail images, a bar code, a textual message and/or print re-ordering information. Moreover, a first image in a sub-order may have one or more print parameters that differ from one or more print parameters of a second image in the sub-order. In addition, dividing the received order into the plurality of sub-orders may be performed by a first entity (e.g., a photo-finishing enterprise) and printing the sub-orders may be performed by a second entity (e.g., a goods/service provider enterprise such as a supermarket, a drugstore, a post office, or an online grocer). Distributing the printed image copies further may include delivering a recipient's printed image copies along with an unrelated order of goods/services associated with that recipient.

Brief Summary Text (22):

In another aspect, a computer-implemented method of distributing photographic prints to a plurality of recipients may include receiving an order specifying (i) a plurality of recipients, (ii) for each specified recipient, a set of one or more digital images associated with that recipient, and (iii) for each digital image, a set of one or more print parameters (e.g., print size, number of copies, print finish, and/or a textual message). The method also may include dividing the received order into a plurality of

sub-orders so that each sub-order corresponds to a different specified recipient and includes an instance of each digital image associated with the recipient corresponding to the sub-order. The method further may include printing the instantiated digital images in each of the sub-orders according to the print parameters associated with each image, and distributing the prints to their respective associated recipients. The order may be received by receiving interactive input from a user of a computer system (e.g., the user's personal computer system or a public entry terminal).

Brief Summary Text (24):

The method further may include printing a destination identifier that identifies the specified recipient for a corresponding sub-order. The destination identifier may delimit a corresponding sub-order and/or may include one or more of the following items: a shipping address, a recipient's name, an index of thumbnail images, a bar code, a textual message and/or print re-ordering information. Furthermore, a first image in a sub-order may have print parameters that differ from print parameters of a second image in the sub-order.

Brief Summary Text (28):

In another aspect, a print distribution system may include a front-end computer sub-system for receiving an order specifying a plurality of recipients (including, e.g., an individual, a business entity, and/or an address) and, for each specified recipient, a set of one or more images associated with that recipient. The system also may include a printing sub-system for printing at least one copy of each image in each recipient's image set, and a distribution sub-system for distributing the printed image copies to their respective associated recipients. At least one of the specified recipients may be different from a user from whom the order was received.

Brief Summary Text (31):

Optionally, the printing sub-system may include a sub-system for dividing the received order into a plurality of sub-orders so that each sub-order corresponds to a different recipient. The printing sub-system may print a set of one or more images in each sub-order and/or may print a run of prints associated with a specified recipient for each sub-order. The printing sub-system also may print a destination identifier that identifies the specified recipient for a corresponding run of prints. The destination identifier may delimit a corresponding sub-order and/or may include one or more of the following items: a shipping address, a recipient's name, a thumbnail image index, a bar code, a textual message and/or print re-ordering information.

Brief Summary Text (32):

Dividing the received order into the plurality of sub-orders may include instantiating, for each image in the received order, a copy of the image for each recipient designated to receive a print of that image. An instantiated copy may include a digital image file. Moreover, dividing the received order into the plurality of sub-orders may be performed by a first entity (e.g., a photo-finishing enterprise) and printing the sub-orders may be performed by a second entity (e.g., a goods/service provider enterprise such as a supermarket, a drugstore, a post office, or an online grocer). Distributing the printed image copies may include delivering a recipient's printed image copies along with an unrelated order of goods/services associated with that recipient.

Brief Summary Text (34):

In another aspect, a method of facilitating print re-orders includes receiving an order specifying a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient. The method also may include, for each of the plurality of recipients specified in the received order, printing at least one copy of each image in the recipient's image set and printing a re-order number on a back of each image copy. The re-order number may uniquely identify the image, the recipient of that image, and/or the originator of that image. The method also may include distributing the printed image copies to their respective associated recipients, receiving input (e.g., using an automatic voice or touchtone response system) from a recipient specifying a print re-order number and/or one or more print parameters associated with the print re-order, generating a print of the image associated with the print re-order number, and sending the print to the recipient associated with the print re-order number. Furthermore, the order may include a single transaction sequence such as a single charge

to a financial instrument (e.g., a credit card, a debit card, electronic funds transfer, a gift certificate, or a coupon) that may be terminated by a click of an "order" button.

Brief Summary Text (35):

In another aspect, a computer-implemented method of distributing image prints to a plurality of recipients may include receiving, at a facility corresponding to a first entity (e.g., a photo-finishing enterprise), an order specifying a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient. The method also may include communicating the received order to a facility corresponding to a second entity (e.g., a goods/service provider enterprise such as a supermarket, a drugstore, a post office, or an online grocer). The method further may include, at the second entity's facility, for each of the plurality of recipients specified in the received order, printing at least one copy of each image in the recipient's image set, and distributing the printed image copies to their respective associated recipients. Distributing the printed image copies may include delivering a recipient's printed image copies along with an unrelated order of goods/services associated with that recipient.

Brief Summary Text (36):

Furthermore, prior to communicating the received order to the facility corresponding to the second entity, the first entity may divide the received order into a plurality of sub-orders so that each sub-order corresponds to a different recipient. Printing may include printing a set of one or more images in each sub-order and/or printing, for each sub-order, a run of prints associated with a specified recipient. Also, a destination identifier that identifies the specified recipient for a corresponding run of prints may be printed. The destination identifier may delimit a corresponding sub-order and/or may include one or more of the following items: a shipping address, a recipient's name, a thumbnail image index, a bar code, a textual message and/or print re-ordering information.

Brief Summary Text (37):

In another aspect, a computer-implemented method of distributing image prints to a plurality of recipients may include receiving an order from a user at a public entry terminal (e.g., a digital drop box, a point-of-sale station, or a kiosk), the order specifying a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient. The method also may include transmitting the received order from the public entry terminal to a photo-finishing facility. The method further may include printing, for each of the plurality of recipients specified in the received order, at the photo-finishing facility at least one copy of each image in the recipient's image set and distributing the printed image copies to their respective associated recipients.

Brief Summary Text (39):

In another aspect, a computer-implemented method of ordering image prints for a plurality of recipients may include receiving at a host system an order from a client system, where the order includes a single transaction sequence and specifies a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient. The method further may include, at the host system, dividing the received order into a plurality of sub-orders, where each sub-order corresponds to a different recipient. The method also may include printing a set of one or more images in each sub-order and/or printing, for each sub-order, a run of prints associated with a specified recipient. Moreover, the method may include printing a destination identifier that identifies the specified recipient for a corresponding run of prints. The destination identifier may delimit a corresponding sub-order and/or may include one or more of the following items: a shipping address, a recipient's name, a thumbnail image index, a bar code, a textual message and/or print re-ordering information.

Brief Summary Text (41):

Moreover, dividing the received order into the plurality of sub-orders may include, for each image in the received order, instantiating a copy of the image for each recipient designated to receive a print of that image. An instantiated copy may include a digital image file.

Brief Summary Text (44):

One or more of the following advantages may be provided. The systems and techniques described here provide intuitive and convenient mechanisms that allow a user to order prints of images and have the prints distributed to multiple recipients at different locations with a minimum of time, trouble and expense on the part of the ordering user. For example, in a single ordering sequence, a user can specify a set of one or more prints and have them distributed to multiple different recipients. As a result, the user need not reenter redundant information--for example, identifying the images to be printed, supplying payment information, and the like--as otherwise would be required if the print order was limited to a single shipping destination. Moreover, by allowing a user to specify multiple recipients within a single print order, the user is not subjected to a minimum dollar amount for each of several different orders. Rather, because multiple recipients are allowed, the user is better able to satisfy the minimum dollar amount without being forced to order more prints than otherwise would be desired.

Brief Summary Text (47):

In addition, by employing a non-linear workflow model certain benefits and efficiencies are realized. More particularly, by taking a single multiple-recipient order, breaking it down into sub-orders corresponding to a single recipient, selectively instantiating and re-organizing multiple instances of designated images to build each sub-order, and then printing each sub-order as a separate run of prints for the associated recipient, a single print order (transaction sequence) can be used to order prints to be generated and distributed to multiple recipients. Moreover, such a non-linear workflow tends to increase the efficiency and/or speed of the print generation and distribution tasks dramatically.

Brief Summary Text (50):

In another aspect, a method of facilitating print re-orders includes receiving an order specifying a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient. For each of the plurality of recipients specified in the received order, the method includes printing at least one copy of each image in the recipient's image set and printing a re-order number on back of each image copy, the re-order number having a unique identifier and a sequence number.

Brief Summary Text (54):

In yet another aspect, a method facilitates photographic print re-ordering by encoding a photographic print with an identifier identifying a recipient of the photographic print, an originator of the photographic print, an image from which the photographic print was generated, and one or more printing parameters associated with the photographic print.

Brief Summary Text (55):

In yet another aspect, a method of facilitating photographic print re-ordering includes: receiving an order to send a photographic print of an image to a plurality of recipients; generating a photographic print of the image for each of the plurality of recipients; and encoding each photographic print with a reorder number specific to that prints' intended recipient.

Brief Summary Text (56):

In another aspect, a computer-implemented method personalizes image prints by: receiving an order designating an image and a plurality of recipients to receive a print of the image; printing recipient-specific information on one or more of the image prints; and distributing the image prints to their respective recipients.

Detailed Description Text (3):

FIG. 3A is a block diagram of one deployment of a print generation and distribution system 300. In general, the system of FIG. 3A enables users to transmit images to a photo-finisher and then order prints of those images to be sent to one or more recipients. In FIG. 3A, one or more customers 302-304 communicate with the system 300 over a wide area network 310 such as the Internet. In one embodiment, the system 300 stores digital images that have been submitted by the customers 302-304 over the Internet for subsequent printing and delivery to designated recipients.

Detailed Description Text (6):

In general, this process of instantiating multiple image instances and re-ordering those instances as appropriate to build sub-orders represents a non-linear workflow model which, among other advantages, enables a user, through a single print order (delimited, for example, by a single transaction sequence and/or a single credit or debit card charge), to specify multiple different recipients, each of whom can receive his or her own personalized set of prints in which each can be generated according to customizable parameters (e.g., size, number of copies, finish, personal message, etc.). In addition, the non-linear workflow can cause a dramatic increase in the efficiency and/or speed with which prints can be generated and distributed to one or more recipients.

Detailed Description Text (7):

FIG. 3B illustrates an example of a non-linear workflow in which sub-orders are generated from a print order specifying multiple recipients. In this example, assume that a user places an order 352 for prints (for example, by creating associations between images and recipients) identifying three different recipients A, B, and C, each of who is to receive a set of prints selected from images 1-10. In this example, assume that Recipient A is to receive prints of Images 1, 2, 4 and 8 (Recipient A's image associations are indicated by solid lines), Recipient B is to receive prints of images 1, 7 and 9 (Recipient B's image associations are indicated by dashed lines) and Recipient C is to receive prints of Images 1, 2 and 7 (Recipient C's image associations are indicated by dotted lines). The images 1, 2, 4, 7, 8, and 9 in print order 352 are then instantiated and re-organized as appropriate to generate, or build, three separate sub-orders 354, 356, 358--one for each of the three different recipients A, B, C, respectively. Each of these sub-orders in turn is sent to the printing system to generate a contiguous run of prints for the associated recipient.

Detailed Description Text (8):

According to this example, Image 1 would be instantiated three times, once for each of the three different print sub-orders 354, 356, and 358 in which it is included (that is, each of Recipients A, B, and C is to receive a print of Image 1). Similarly, Image 2 would be instantiated twice (one instance for Recipient A's sub-order 354 and another instance for Recipient C's sub-order 358), as would Image 7 (one instance for Recipient B's sub-order 356 and another instance for Recipient C's sub-order 358). Each of the remaining images (4, 8 and 9) would be instantiated only once because in each case the image is being printed for, and sent to, only a single recipient (equivalently, is part of a single sub-order). As the images are instantiated according to the various sub-orders for which they are required, the image instances are inserted into a sub-order sequence, which when completely built, can be sent to the printer to generate a corresponding run of prints.

Detailed Description Text (11):

FIG. 4 is a flowchart of a process that allows a user to transmit images to a photo-finisher and then order prints of those images to be sent to one or more recipients. In general, the print generation and multi-recipient distribution process of FIG. 4 is oriented to an image, or set of images, of which a user desires to distribute prints to a group of one or more recipients. That is, a user's print order is delimited by a set of images selected by the user and not by the number or location of recipients to receive the prints.

Detailed Description Text (16):

For example, a public entry terminal placed at a drug store could have a slot that accepts removable storage media, such as a FLASH memory chip, and reads image files from an inserted storage medium. Alternatively, or in addition, the public terminal could include one or more data ports (e.g., a USB or SCSI port) through which users could upload images to the public terminal directly from their digital cameras. The uploaded image files could be displayed on a monitor to the user, who could then select images of which prints are desired, specify print parameters, and designate recipients for the prints. In addition, the public entry terminal could include application software or utilities that allow users to edit images as desired, for example, to resize or crop images, to change an image's orientation, to remove redeye, to modify the color characteristics, etc. In any event, after the user had uploaded his or her images and has specified the images to be printed and the intended recipients, the public entry terminal could formulate a corresponding order and forward it on the photo-finisher's host system

to initiate fulfillment.

Detailed Description Text (19) :

In addition to hosting the user's images on a web page, the photo-finisher also can store the images in an archive (e.g., a database management system (DBMS)) so that the user, and/or others given authorization by the user, can access them at any time in the future. Such access might be desired to order additional prints or simply to be able to share an online photo album among specified users. With regard to the former (ordering additional prints), each print could be encoded on its back or front with a print re-order number that uniquely identifies the print, the image used to create the print, the particular recipient of the print, and/or the originator of the print/image. Such a print re-order number could be used by a print recipient to order additional copies of the print, for example, over the Internet by visiting a URL specified on the received print. As another example, by maintaining an automatic voice and/or touchtone response system at the photofinisher's facility, a print recipient could call a toll-free telephone number (also potentially printed on the print) associated with the automatic response system and punch in (or speak) the unique re-order number for the print of which an additional copy is desired. Optionally, the user also could key in appropriate information using the telephone keypad to specify parameters for the re-ordered print or image (e.g., size, number of copies, finish). If no such optional parameters were entered by the recipient, a default condition could be to use the parameters of the original print copy received by that recipient. In any event, the automatic response system could use the entered unique re-order number to generate an order for the particular print identified by the re-order number and then have the print delivered to the recipient identified by the re-order number.

Detailed Description Text (22) :

After the prints, recipients and respective parameters have been specified, the user's order is fulfilled by making prints of the designated images and distributing them to the specified recipients (step 406). In general, fulfillment can be accomplished either by the photo-finisher itself or by another entity or company in cooperation with the photo-finisher. Potentially, the photo-finisher could have business arrangements with two or more different fulfillment companies, which could be dispersed geographically (at various locations around the country or world) to minimize shipping costs, labor costs and/or delivery time. Alternatively, or in addition, different fulfillment companies could be used which have different areas of expertise or production ability. For example, one fulfillment company could specialize in making standard photographic prints, another fulfillment company could specialize in printing greeting cards, yet another fulfillment company could specialize in generating T-shirts, and so on.

Detailed Description Text (34) :

To accomplish the former distribution task (sending prints of the digital image to the specified recipients), the image-alias association(s) specified by the user could be used to generate orders that are sent to a fulfillment enterprise that would be responsible for generating a print of the image and shipping a copy to each of the recipients represented by the selected distribution alias. The fulfillment enterprise either could be associated with a company that takes orders for image prints, or the fulfillment enterprise could be implemented as one or more independent organizations. As an example, the fulfillment enterprise could be a production facility that produces photographic prints from digital images and then sends the prints (using, for example, a postal or courier service) to the specified recipients. In this example, the front-end image ordering software would transmit electronically to the fulfillment enterprise various information, e.g., identifying the digital images to be printed, parameters for each digital print to be made (e.g., size, finish, number of copies, personal message, etc.), address information for each of the recipients, payment information, and the like, and then the fulfillment enterprise would utilize this information in fulfilling the order.

Detailed Description Text (36) :

The GUI of FIG. 5 represents only one of several alternative mechanisms or interfaces through which users could designate intended recipients of prints. For example, a standard address book metaphor, such as found in certain e-mail applications or personal information manager (PIM) programs, could be used to designate recipients. To do so, the user would select one or more recipients from among the user's address book entries and

then specify which images should be printed and distributed to that user or those users. Or the process could proceed in the opposite order--the user could first specify images to be printed and then select one or more recipients from the user's address book. Alternatively, or in addition, the user could simply type in the contact information, for example, using a text entry form or command-line interface, to designate print recipients. Virtually any other mechanism or technique for identifying recipients could be used instead or in addition. For example, the user could access one of the several directory services available on the Internet (e.g., Bigfoot at <http://www.bigfoot.com>) to locate, identify and/or select print recipients.

Detailed Description Text (47):

FIG. 8 is a flowchart of a process for designating recipients of image print copies and delivering the copies to the designated recipients. In general, the steps of designating recipients and specifying images to be printed can be performed in any order. For example, the recipients can be designated first and then the images to be printed can be specified, or vice versa. Moreover, these steps can be repeated and interleaved as desired in a single print ordering sequence.

Detailed Description Text (48):

Furthermore, a print ordering sequence need not use distribution aliases or graphical association techniques, but rather can employ any other mechanisms or tools for specifying recipients and images to be printed. Accordingly, the process depicted in FIG. 8 illustrates merely one example of a typical print ordering sequence. Virtually any other sequence or order of steps that achieve substantially the same or a sufficiently similar result could be used instead.

Detailed Description Text (53):

In one embodiment, the fulfillment enterprise fulfills the print orders by printing, generally in succession, a "run" of prints for each intended recipient (i.e., prints of the images designated for that user). Each run--that is, each batch of prints destined for a different recipient--is separated from adjacent runs by a destination identifier that can be generated by the same equipment and processes as the actual image prints. FIG. 9 shows an example of a destination identifier 900 that includes several items of information including a message 902, potentially including text specified by the user who ordered the prints (Jane Smith); a thumbnail image index 903 including thumbnail images 509, 511, 513, and 516-518 corresponding to the prints sent to this recipient (Joe Smith); reordering information 908; a bar code 910 (encoding, for example, shipping or billing information and/or manufacturing process information used to maintain quality control during print generation); and an address field 904 displaying the recipient's address.

Detailed Description Text (65):

Since the UID will be given to a recipient with a particular print, a simple incrementing of the UID for each additional print, if not protected against, could allow the possibility where the recipient can predict the reprint request number and order, without authorization, the next image in the sequence of pictures, even if the originator did not want that recipient to have a print of the next image in the sequence. To provide privacy and security, and to help prevent this possibility, the sequence number is appended to the UID so that the reorder number for the each print in the series is significantly different from the prior print.

CLAIMS:

8. A method of facilitating print re-orders, the method comprising: receiving an order specifying a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient; and for each of the plurality of recipients specified in the received order, printing a plurality copies of images in the recipient's image set and printing a re-order number on back of each image copy, the re-order number having an identifier unique to the image copy and specifying properties of the image copy.

32. A computer-implemented method of personalizing image prints, the method comprising: receiving an order designating an image and a plurality of recipients to receive a print

of the image; printing print-specific information on each of the image prints; and distributing the image prints to their respective recipients, wherein the recipient-specific information comprises a textual message for one or more of the recipients and wherein the textual message is specified by a user that placed the order.

Full	Title	Citation	Front	Review	Classification	Date	Reference	SEQUENCES	EXEMPLAR	Claims	KOMC	Draw Desc	Ima
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31. Document ID: US 6646754 B1

L1: Entry 31 of 57

File: USPT

Nov 11, 2003

DOCUMENT-IDENTIFIER: US 6646754 B1

TITLE: Backprinting image prints

Abstract Text (1):

A system and method of backprinting image prints in which an order is received specifying one or more recipients and, for each specified recipient, a set of one or more images associated with that recipient. For each recipient specified by the order, the images associated with the recipient are separated into at least one printable unit of images, and, for each printable unit, each image in the printable unit is printed on a first side of an image print. Backprinting information is backprinted on the other side of one or more of the image prints. The backprinting information can be received from a user and backprinted onto one or more images.

Brief Summary Text (21):

The present inventors recognized that it would be advantageous to take a single multiple-recipient order for image prints, break it down into sub-orders corresponding to a single recipient, break down each sub-order into printable units (referred to as "sub-batches") having matching processing parameters, and scheduling and printing the sub-batches on automated printing equipment in an optimized manner.

Brief Summary Text (24):

In one aspect, a method of backprinting image prints includes receiving an order specifying one or more recipients and, for each specified recipient, a set of one or more images associated with that recipient. The method may also include, for each recipient specified by the order, separating the images associated with the recipient into at least one printable unit of images and, for each printable unit, printing each image in the printable unit on a first side of an image print. The method further may include backprinting on the other side of one or more of the image prints.

Brief Summary Text (27):

In another aspect, a backprinting system may include a front-end computer sub-system for receiving an order specifying one or more recipients and, for each specified recipient, a set of one or more images associated with that recipient. The system also may include a scheduler, in communication with the front-end computer sub-system and the plurality of printers, that, for each recipient specified by the order, separates the images associated with the recipient into at least one printable unit of images. The system may further include one or more printers, in communication with the scheduler, for printing each image in a printable unit on a first side of an image print. Moreover, the system may include one or more backprinters, each backprinter receiving one or more image prints from at least one of the one or more printers and backprinting on the other side of the one or more image prints. Each backprinter may backprint non-image information on the one or more image prints.

Brief Summary Text (43):

Also, backprinting information (e.g., non-image information) can be backprinted on the

back of an image print. The information backprinted on the back of an image print can be used, for example, in the print lab to identify and/or track individual image prints as well as the sub-batches, batches, sub-orders, and orders with which the image prints are associated. Also, the backprinted information can be used to convey additional information to a recipient of the image print (e.g., a user-input message, advertisement, where reprints can be ordered, and/or tracking information such as an image number and/or sub-order or order number). The backprinting information can also be used to encode an audio message (e.g., an audio message provided by the photographer or other user) in a bar code that the recipient of the image print can decode to listen to the audio message.

Detailed Description Text (3):

FIG. 4A is a block diagram of one deployment of a print generation and distribution system 300. In general, the system of FIG. 4A enables users to transmit images to a photo-finisher and then order prints of those images to be sent to one or more recipients. In FIG. 4A, one or more customers 302-304 communicate with the system 300 over a wide area network 310 such as the Internet. In one embodiment, the system 300 stores digital images that have been submitted by the customers 302-304 over the Internet for subsequent printing and delivery to designated recipients.

Detailed Description Text (6):

In general, this process of instantiating multiple image instances and re-ordering those instances as appropriate to build sub-orders represents a non-linear workflow model which, among other advantages, enables a user, through a single print order (delimited, for example, by a single transaction sequence and/or a single credit or debit card charge), to specify multiple different recipients, each of whom can receive his or her own personalized set of prints in which each can be generated according to customizable parameters (e.g., size, number of copies, finish, personal message, etc.). In addition, the non-linear workflow can cause a dramatic increase in the efficiency and/or speed with which prints can be generated and distributed to one or more recipients.

Detailed Description Text (7):

FIG. 4B illustrates an example of a non-linear workflow in which sub-orders are generated from a print order specifying multiple recipients. In this example, assume that a user places an order 352 for prints (for example, by creating associations between images and recipients) identifying three different recipients A, B, and C, each of whom is to receive a set of prints selected from images 1-10. In this example, assume that Recipient A is to receive prints of Images 1, 2, 4 and 8 (Recipient A's image associations are indicated by solid lines), Recipient B is to receive prints of images 1, 7 and 9 (Recipient B's image associations are indicated by dashed lines) and Recipient C is to receive prints of Images 1, 2 and 7 (Recipient C's image associations are indicated by dotted lines). The images 1, 2, 4, 7, 8, and 9 in print order 352 are then instantiated and re-organized as appropriate to generate, or build, three separate sub-orders 354, 356, 358--one for each of the three different recipients A, B, C, respectively. Each of these sub-orders in turn is sent to the printing system to generate a contiguous run of prints for the associated recipient.

Detailed Description Text (8):

According to this example, Image 1 would be instantiated three times, once for each of the three different print sub-orders 354, 356, and 358 in which it is included (that is, each of Recipients A, B, and C is to receive a print of Image 1). Similarly, Image 2 would be instantiated twice (one instance for Recipient A's sub-order 354 and another instance for Recipient C's sub-order 358), as would Image 7 (one instance for Recipient B's sub-order 356 and another instance for Recipient C's sub-order 358). Each of the remaining images (4, 8 and 9) would be instantiated only once because in each case the image is being printed for, and sent to, only a single recipient (equivalently, is part of a single sub-order). As the images are instantiated according to the various sub-orders for which they are required, the image instances are inserted into a sub-order sequence, which when completely built, can be sent to the printer to generate a corresponding run of prints.

Detailed Description Text (11):

FIG. 5 is a flowchart of a process that allows a user to transmit images to a photo-

finisher and then order prints of those images to be sent to one or more recipients. In general, the print generation and multi-recipient distribution process of FIG. 5 is oriented to an image, or set of images, of which a user desires to distribute prints to a group of one or more recipients. That is, a user's print order is delimited by a set of images selected by the user and not by the number or location of recipients to receive the prints.

Detailed Description Text (16):

For example, a public entry terminal placed at a drug store could have a slot that accepts removable storage media, such as a FLASH memory card. On insertion, the public entry terminal could read image files from the inserted storage medium. Alternatively, or in addition, the public terminal could include one or more data ports (e.g., a USB or SCSI port) through which users could upload images to the public terminal directly from their digital cameras. The uploaded image files could be displayed on a monitor to the user, who could then select images of which prints are desired, specify print parameters, and designate recipients for the prints. In addition, the public entry terminal could include application software or utilities that allow users to edit images as desired, for example, to resize or crop images, to change an image's orientation, to remove redeye, to modify the color characteristics, etc. In any event, after the user had uploaded his or her images and has specified the images to be printed and their respective intended recipients, the public entry terminal could formulate a corresponding order and forward it on the photo-finisher's host system to initiate fulfillment.

Detailed Description Text (22):

After the prints, recipients and respective parameters have been specified, the user's order is fulfilled by making prints of the designated images and distributing them to the specified recipients (step 406). In general, fulfillment can be accomplished either by the photo-finisher itself or by another entity or company in cooperation with the photo-finisher. Potentially, the photo-finisher could have business arrangements with two or more different fulfillment companies, which could be dispersed geographically (at various locations around the country or world) to minimize shipping costs, labor costs and/or delivery time. Alternatively, or in addition, different fulfillment companies could be used which have different areas of expertise or production capability. For example, one fulfillment company could specialize in making standard photographic prints, another fulfillment company could specialize in printing greeting cards, yet another fulfillment company could specialize in generating T-shirts, and so on.

Detailed Description Text (30):

Image processing that does not depend on which type of printer or other output device will ultimately be used need only be performed once for each image in the order regardless of the number of times that the image ultimately will be printed. For example, if an image is to be printed for more than one recipient (e.g., if an image is included in more than one sub-order), such printer-independent processing activities need only be performed once for that image. Also, if a given image is to be printed multiple times on the same type of printer with the same print parameters, those image processing activities that are dependent on which type of printer and/or printer parameters ultimately will be used need only be performed once for that image and need not be performed for each of the multiple times that the image is to be printed on the same type of printer with the same print parameters.

Detailed Description Text (33):

In step 508, each image is instantiated (e.g., by creating a separate copy of data such as control and/or image data for that image) as needed for printing. For example, if desirable, a given image that is to be printed for multiple recipients can be instantiated at least once for each of the multiple recipients (e.g., for each sub-order and/or for each sub-batch). In addition, or alternatively, if the printer on which a given image is to be printed can operate in a more efficient manner (or if it is otherwise desirable to do so), an image that is to be printed multiple times on given printer can be instantiated once for each time that the image is to be printed.

Detailed Description Text (34):

In step 510, each image is printed (or a physical manifestation of each image is otherwise created) in accordance with the print ordering. The printing operation includes

printing or otherwise generating a physical representation of the image (e.g., printing the image on the front side of an image print). Printing can also include printing or otherwise including non-image information (e.g., bar codes, identification numbers, messages, advertisements, reorder information, etc.) on one or more of the prints or other physical manifestations of the image. The non-image information can be used for controlling and monitoring the printing, packaging, and/or shipping of the image and/or can be used to impart predetermined information to the recipient of the image. For example, as shown in FIG. 8, non-image information may be printed on the back (i.e., non-image side) of an image print 920 and may include a unique identification number 922 for the image from which the print was made (i.e., an "image ID" number), a unique order identification number 924 (which may encode recipient information), reorder information 926 such as a phone number 928 and/or a URL 930 for a website from which prints can be reordered, a bar code 932 (encoding, for example, an audio message or processing data), and/or a user specified message 934. Also, a different user specified message 934 can be printed for different recipients (e.g., one message can be printed for the person who took the image and other messages can be specified for the other recipients). In addition, the non-image information may include the name of the photographer who took the image, the date the image was taken, the date the image was printed, a copyright notice, and language describing any legal restrictions on using the image.

Detailed Description Text (37):

One embodiment of a system 600 in which the process 500 can be implemented is shown in FIG. 9. In the print lab system 600 shown in FIG. 9, each order includes control data and image data. The control data contains information such as print parameters (including print size, number of copies and print finish), user contact information, recipient information (including the shipping address of each recipient and the image IDs of each image associated with that recipient), payment information, and any special messages that are to be printed or encoded on any of the image prints included in the order. The image data includes the pixel data used to generate the image (e.g., JPEG data). In the embodiment shown in FIG. 9, the control data and the image data for each order are stored separately after originally being received from the user. The control data for each order is stored in an orders database 602, while the image data for each order is stored in an image archive database 604. It is to be understood, however, that at least some, if not all, of the control data can be stored with the image data (e.g., in the image archive database 604 or elsewhere) in either the orders database 602, the image archive database 604, or elsewhere, if the system designer found it desirable to do so.

CLAIMS:

1. A method of backprinting image prints comprising: receiving an order specifying a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient; for each recipient specified by the order, separating the images associated with the recipient into at least one printable unit of images; for each printable unit, printing each image in the printable unit on a first side of an image print; and backprinting non-image information on the other side of one or more of the image prints, wherein the non-image information includes a message and wherein backprinting comprises backprinting a first message on the other side of one or more image prints associated with a first recipient and backprinting another message, different from the first message, on the other side of one or more image prints associated with another recipient.

13. A method of backprinting image prints comprising: receiving an order specifying a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient; for each recipient specified by the order, separating the images associated with the recipient into at least one printable unit of images; for each printable unit, printing each image in the printable unit on a first side of an image print; and backprinting non-image information on the other side of one or more of the image prints, wherein the non-image information includes a message and wherein the message includes one or more of the following: name of a photographer who took the image, date the image was taken, date the image was printed, a copyright notice, language describing any legal restrictions on using the image, and an advertisement.

18. A backprinting system comprising: a front-end computer sub-system for receiving an

order specifying a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient; a scheduler, in communication with the front-end computer sub-system and a plurality of printers, that, for each recipient specified by one of the orders, separates the images associated with the recipient into at least one printable unit of images; one or more printers, in communication with the scheduler, for printing each image in a printable unit on a first side of an image print; and one or more backprinters, each backprinter receiving one or more image prints from at least one of the one or more printers and backprinting non-image information on the other side of the one or more image prints, wherein the non-image information includes a message and wherein each backprinter backprints a first message on the other side of one or more image prints associated with a first recipient and backprints another message, different from the first message, on the other side of one or more image prints associated with a second recipient.

28. A backprinting system comprising: a front-end computer sub-system for receiving an order specifying a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient; a scheduler, in communication with the front-end computer sub-system and the plurality of printers, that, for each recipient specified by the order, separates the images associated with the recipient into at least one printable unit of images; one or more printers, in communication with the scheduler, for printing each image in a printable unit on a first side of an image print; and one or more backprinters, each backprinter receiving one or more image prints from at least one of the one or more printers and backprinting non-image information on the other side of the one or more image prints, wherein the non-image information includes a message and wherein the message includes one or more of the following: name of a photographer who took the image, date the image was taken, date the image was printed, a copyright notice, language describing any legal restrictions on using the image, and an advertisement.

31. A backprinting system comprising: a front-end computer sub-system for receiving an order specifying a plurality of recipients and, for each specified recipient, a set of one or more images associated with that recipient; a scheduler, in communication with the front-end computer sub-system and a plurality of printers, that, for each recipient specified by the order, separates the images associated with the recipient into at least one printable unit of images; one or more printers, in communication with the scheduler, for printing each image in a printable unit on a first side of an image print; and one or more backprinters, each backprinter receiving one or more image prints from at least one of the one or more printers and backprinting on the other side of the one or more image prints and curl reduction equipment that reduces curling of the image print prior to backprinting.

58. An article of manufacture made in response to an order specifying a plurality of recipients, the article comprising: an image print medium having a scanable symbol embodied on the back of the image print, wherein the scanable symbol causes a scanner to decode information encoded in the scanable symbol when the scanable symbol is scanned by the scanner, wherein the scanable symbol is a bar code that causes a bar code reader to decode information encoded in the bar code and wherein the bar code encodes a number associated with the article of manufacture, the bar code causing the scanner to identify the article of manufacturer by decoding the number.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequencing	Image Regions	Claims	KMC	Draw Desc	Ima
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32. Document ID: US 6618168 B1

L1: Entry 32 of 57

File: USPT

Sep 9, 2003

DOCUMENT-IDENTIFIER: US 6618168 B1

TITLE: Image processing system and computer-readable recording medium

Detailed Description Text (9):

In the present embodiment, the order file is a structured storage file as shown in FIG. 3. Under a root storage, the order file has an object class identifier (CLSID), property information of the order file, a stream showing information regarding an orderer, and a storage storing specific information regarding an order. The storage comprises an order storage corresponding to an order one to one. Each order storage comprises an order content stream describing the quantity and the size of print and so on, a recipient stream describing information regarding a recipient of the print, and a link information stream linking to image data to be printed. The recipient stream is used in the case where additional print is ordered so that the print is distributed to the orderer's friends, for example.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw. Desc	Ima
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 33. Document ID: US 6583799 B1

L1: Entry 33 of 57

File: USPT

Jun 24, 2003

DOCUMENT-IDENTIFIER: US 6583799 B1

TITLE: Image uploading

Detailed Description Text (6):

If the user has not dragged and dropped an image over the area, the process 300 allows a user to perform other viewing operations (step 310). Examples of the other viewing operations include creating and editing image files before ordering or shipping physical manifestations of one or more images. The physical manifestation of the digital content may include photographic prints of the one or more digital images, framed photographic prints, photo-album pages bearing one or more digital images, compositions of digital images and other graphical and/or textual content, and/or artifacts bearing a digital image such as a novelty item, a shirt, a coffee mug, a key-chain, a mouse pad, a magnet, or a deck of playing cards. Optionally, the set of digital content may include graphical and/or textual content, and the physical manifestation of the set of digital content may include a card (e.g., a greeting card, a holiday card, an announcement, a playing card, a post card, a thank you card, or an invitation), an advertisement, a coupon, and/or a bound volume (e.g., a photo-album or a travel book) bearing the graphical and/or textual content. The graphical and/or textual content can include digital images, digitized content, and/or computer-generated content. Other operations include ordering prints associated with all images, or alternatively dividing an order into a plurality of sub-orders so that each sub-order corresponds to a different specified recipient and includes an instance of each digital image associated with the recipient corresponding to the sub-order. The order may be specified by receiving interactive input from the viewer.

Detailed Description Text (29):

After the prints, recipients and respective parameters have been specified, the user's order is fulfilled by making prints of the designated images and distributing them to the specified recipients (step 406). In general, fulfillment can be accomplished either by the photo-finisher itself or by another entity or company in cooperation with the photo-finisher. Potentially, the photo-finisher could have business arrangements with two or more different fulfillment companies, which could be dispersed geographically (at various locations around the country or world) to minimize shipping costs, labor costs and/or delivery time. Alternatively, or in addition, different fulfillment companies could be used which have different areas of expertise or production capability. For example, one fulfillment company could specialize in making standard photographic prints, another fulfillment company could specialize in printing greeting cards, yet another fulfillment company could specialize in generating T-shirts, and so on.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Drawn Desc	Ima
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34. Document ID: US 6570640 B1

L1: Entry 34 of 57

File: USPT

May 27, 2003

DOCUMENT-IDENTIFIER: US 6570640 B1

TITLE: Method of processing a roll of photographic film and distributing visual prints

Detailed Description Text (32) :

The index print 89 is then sent to the desired recipient 8b along with instructions for ordering photographic merchandise based on the delivered images. In a preferred embodiment, a toll-free number is provided, which the recipient 8b can immediately call 8c and place an order for a visual print based on any printed photograph in the index print. In an alternate embodiment, an order form can be included with the index print, which the recipient can fill out and return to place an order 8d. For the toll-free telephone number, the order may be placed with a human operator or an automated response system 8e of a type commercially available. A human operator may utilize an interface similar to the HTML interface previously described above. However, the operator accesses the digital images on the image server 16 using the unique access code provided by the caller. Otherwise, the types of screens, items to order and information collected are similar to the HTML interface previously described.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Drawn Desc	Ima
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35. Document ID: US 6512570 B2

L1: Entry 35 of 57

File: USPT

Jan 28, 2003

DOCUMENT-IDENTIFIER: US 6512570 B2

TITLE: Method of processing a roll of exposed photographic film containing photographic images into corresponding digital images and then distributing visual prints produced from the digital images

Detailed Description Text (32) :

The index print 8a is then sent to the desired recipient 8b along with instructions for ordering photographic merchandise based on the delivered images. In a preferred embodiment, a toll-free number is provided, which the recipient 8b can immediately call 8c and place an order for a visual print based on any printed photograph in the index print. In an alternate embodiment, an order form can be included with the index print, which the recipient can fill out and return to place an order 8d. For the toll-free telephone number, the order may be placed with a human operator or an automated response system 8a of a type commercially available. A human operator may utilize an interface similar to the HTML interface previously described above. However, the operator accesses the digital images on the image server 16 using the unique access code provided by the caller. Otherwise, the types of screens, items to order and information collected are similar to the HTML interface previously described.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Drawn Desc	Ima
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36. Document ID: US 6327049 B1

L1: Entry 36 of 57

File: USPT

Dec 4, 2001

DOCUMENT-IDENTIFIER: US 6327049 B1

TITLE: Order information recording medium and order file generating apparatus for photographic service

Detailed Description Text (25) :

The order file shown in FIG. 4 has a structure wherein a stream describing properties of the order file, a stream describing information regarding an orderer, and at least one order information storage describing the order information are stored under a root storage. In each order information memory, streams respectively describing recipient information, a content of a print such as print size, image information, and template information are stored.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstracts	Assignments	Claims	KINIC	Drawn Desc	Image
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 37. Document ID: US 6173890 B1

L1: Entry 37 of 57

File: USPT

Jan 16, 2001

DOCUMENT-IDENTIFIER: US 6173890 B1

TITLE: Information recording medium and information transmission method using the information recording medium

Abstract Text (1) :

An information recording medium comprises a commodity image portion representative of each commodity by an image, a commodity selectively designating dot code including a tone signal corresponding to commodity designation information for individually selectively designating each commodity, a control information inputting dot code including a tone signal corresponding to information regarding various operation for designating start or cancel of ordering the commodity to a recipient by an originator, and a quantity information inputting dot code including a tone signal corresponding to quantity information for designating quantity of the commodities to be ordered and printed on a commodity catalog. When its orderer manually scans the respective dot codes by a dot code reading device to optically read them, the dot code reading device transmits the tone signals on the basis of the read dot codes from a telephone recording and reproducing adapter to a personal computer of a recipient side through a telephone line.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstracts	Assignments	Claims	KINIC	Drawn Desc	Image
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 38. Document ID: US 6133985 A

L1: Entry 38 of 57

File: USPT

Oct 17, 2000

DOCUMENT-IDENTIFIER: US 6133985 A

TITLE: Method of processing digital images and distributing visual prints produced from the digital images

Detailed Description Text (39) :

The index print 8a is then sent to the desired recipient 8b along with instructions for ordering photographic merchandise based on the delivered images. In a preferred embodiment, a toll-free number is provided, which the recipient 8b can immediately call 8c and place an order for a visual print based on any printed photograph in the index print. In an alternate embodiment, an order form can be included with the index print, which the recipient can fill out and return to place an order 8d. For the toll-free telephone number, the order may be placed with a human operator or an automated response system 8e of a type commercially available. A human operator may utilize an interface similar to the HTML interface previously described above. However, the operator accesses the digital images on the image server 16 using the unique access code provided by the caller. Otherwise, the types of screens, items to order and information collected are similar to the HTML interface previously described.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Ima
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 39. Document ID: US 6092054 A

L1: Entry 39 of 57

File: USPT

Jul 18, 2000

DOCUMENT-IDENTIFIER: US 6092054 A

** See image for Certificate of Correction **

TITLE: Method and apparatus for communicating with a card distribution center for selecting, ordering, and sending social expression cards

Abstract Text (1) :

A system for communicating with a card distribution center for selecting, ordering, and sending social expression cards using a personal computer. The user can enter names and addresses of card recipients into the system wherein the information is maintained in a database. The system displays digitized images of the cards on a display screen which are retrieved from a card database. From the cards displayed, the user can select cards for designated recipients and enter personalized messages and a digitized signature. The user may then send the order to a card distribution center, which processes the order, retrieves and prints the selected card images, including any user messages or user signature, and mails the cards to designated recipients or customers. The system maintains a database of all recipients, addresses, associated occasions and dates, card preferences, relationships and order history.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Ima
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 40. Document ID: US 6017157 A

L1: Entry 40 of 57

File: USPT

Jan 25, 2000

DOCUMENT-IDENTIFIER: US 6017157 A

TITLE: Method of processing digital images and distributing visual prints produced from the digital images

Detailed Description Text (38) :

The index print 8a is then sent to the desired recipient 8b along with instructions for ordering photographic merchandise based on the delivered images. In a preferred embodiment, a toll-free number is provided, which the recipient 8b can immediately call 8c and place an order for a visual print based on any printed photograph in the index

print. In an alternate embodiment, an order form can be included with the index print, which the recipient can fill out and return to place an order 8d. For the toll-free telephone number, the order may be placed with a human operator or an automated response system 8e of a type commercially available. A human operator may utilize an interface similar to the HTML interface previously described above. However, the operator accesses the digital images on the image server 16 using the unique access code provided by the caller. Otherwise, the types of screens, items to order and information collected are similar to the HTML interface previously described.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Examiner	Attorney	Claims	KMC	Draw Desc	Ima
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41. Document ID: US 5960412 A

L1: Entry 41 of 57

File: USPT

Sep 28, 1999

DOCUMENT-IDENTIFIER: US 5960412 A

TITLE: Method and apparatus for communicating with a card distribution center for management, selection, and delivery of social expression cards

Abstract Text (1):

A system for communicating with a card distribution center for selecting, ordering, and sending social expression cards using a personal computer. The user can enter names and addresses of card recipients into the system wherein the information is maintained in a database. The system displays digitized images of the cards on a display screen which are retrieved from a card database. From the cards displayed, the user can select cards for designated recipients and enter personalized messages and a digitized signature. The user may then send the order to a card distribution center, which processes the order, retrieves and prints the selected card images, including any user messages or user signature, and mails the cards to designated recipients or customers. The system maintains a database of all recipients, addresses, associated occasions and dates, card preferences, relationships and order history.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Examiner	Attorney	Claims	KMC	Draw Desc	Ima
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42. Document ID: US 5673205 A

L1: Entry 42 of 57

File: USPT

Sep 30, 1997

DOCUMENT-IDENTIFIER: US 5673205 A

TITLE: Accessing a video message via video snapshots

Brief Summary Text (7):

This invention is directed to solving these and other problems and disadvantages of the prior art. According to the invention, a video message is presented to a recipient of the message as follows. Only the soundtrack of the video message is played back to the recipient. (Playing back only the soundtrack is used herein to mean playing back the soundtrack without also playing back the moving image of the video message to the recipient.) Then in response to receipt of a request from the recipient during playback of the soundtrack, an image frame of the video message is captured. The captured image frame substantially corresponds in the video message to the point in the playback of the soundtrack at which the request was made or received. The captured image frame is then conveyed to the recipient as a still image, illustratively by being transmitted to the recipient for presentation to the recipient as a still image. Hence, a message recipient

need not have full motion video message-retrieval capability in order to retrieve at least some of the image information of a received video message; all that the user needs is still-image retrieval capability--for example, a printer or a fax machine. Still-image retrieval capability is relatively much more commonly available to users than full motion video message-retrieval capability, and therefore enables many more users to obtain at least some of the benefits of video messaging.

Full	Title	Citation	Front	Review	Classification	Date	Reference				Claims	KMC	Draw. Desc	Image
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43. Document ID: US 5666215 A

L1: Entry 43 of 57

File: USPT

Sep 9, 1997

DOCUMENT-IDENTIFIER: US 5666215 A

TITLE: System and method for remotely selecting photographic images

Brief Summary Text (8):

It is seen then that it would be desirable to have an improved system and method for facilitating ordering and re-ordering of prints and other image related services from negatives. Additionally, services such as picture frames for the prints, a Photo CD.TM. optical disc bearing the selected image(s), correspondence related to the selected image(s), or cropped enlargements would be ordered more often if the ordering process was facilitated and the ordered prints and services could be delivered directly to a designated recipient.

Brief Summary Text (11):

In accordance with the present invention, the customer sends photographic negative film to a photo finisher, which then develops the film, scans the film, and stores the scanned image(s). The photofinisher transmits a display file of the scanned images to the customer either by sending a floppy disc containing the display file, or by transmitting the display file over a communication link. The customer is able to display the images(s) on his or her personal computer monitor or interactive TV along with an index number associated with each image. The customer then selects images and services and orders the desired number and size of prints and other image related services for the selected images, and designates a recipient for the order. The designated recipient may be different from the customer placing the order. The photofinisher completes the order and sends the prints to the designated recipient and sends the bill to the customer or charges the customer's credit card account.

Full	Title	Citation	Front	Review	Classification	Date	Reference				Claims	KMC	Draw. Desc	Image
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44. Document ID: US 5666188 A

L1: Entry 44 of 57

File: USPT

Sep 9, 1997

DOCUMENT-IDENTIFIER: US 5666188 A

TITLE: Printing plate mounting device

Brief Summary Text (5):

In order for the correct desired image to be printed on the recipient surface, it is necessary to properly mount the individual color printing plates on a carrier sheet. With flexographic printing plates, often such printing plates are made up of relatively small flexographic printing plate elements, particularly for cartons with large imprinted

portions.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Ima
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45. Document ID: US 5638154 A

L1: Entry 45 of 57

File: USPT

Jun 10, 1997

DOCUMENT-IDENTIFIER: US 5638154 A

TITLE: Printing plate mounting device

Brief Summary Text (5):

In order for the correct desired image to be printed on the recipient surface, it is necessary to properly mount the individual color printing plates on a carrier sheet. With flexographic printing plates, often such printing plates are made up of relatively small flexographic printing plate elements, particularly for cartons with large imprinted portions.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Ima
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46. Document ID: US 5555496 A

L1: Entry 46 of 57

File: USPT

Sep 10, 1996

DOCUMENT-IDENTIFIER: US 5555496 A

TITLE: Method and apparatus for communicating with a card distribution center for management, selection, and delivery of social expression cards

Abstract Text (1):

A system for communicating with a card distribution center for selecting, ordering, and sending social expression cards using a personal computer. The user can enter names and addresses of card recipients into the system wherein the information is maintained in a database. The system displays digitized images of the cards on a display screen which are retrieved from a card database. From the cards displayed, the user can select cards for designated recipients and enter personalized messages and a digitized signature. The user may then send the order to a card distribution center, which processes the order, retrieves and prints the selected card images, including any user messages or user signature, and mails the cards to designated recipients or customers. The system maintains a database of all recipients, addresses, associated occasions and dates, card preferences, relationships and order history.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw Desc	Ima
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47. Document ID: US 5270073 A

L1: Entry 47 of 57

File: USPT

Dec 14, 1993

DOCUMENT-IDENTIFIER: US 5270073 A

TITLE: Heat sensitive recording material, its manufacturing method and image forming process

Brief Summary Text (9):

Such a heat-sensitive transfer-paper, different from heat-sensitive color-paper, requires two composing materials (transfer recipient paper and heat transfer material) in order to get a recording paper having printed images. Therefore, it has such problems as that, for example, control and check must be needed for both of transfer recipient paper and heat transfer material, as the heat-transfer material is composed of support and a colorant containing layer and the foregoing support becomes completely useless after being printed so that the cost of heat transfer material is expensive, as originally the transfer recipient paper and the heat transfer material are separated and the heat transfer material is a thin sheet so that wrinkles are easy to be made on transfer recipier paper and heat transfer material when printing is done while rolled heat-sensitive transfer paper is wound therefore it is liable that printing order goes out of order, troubles occur in winding operation of heat-sensitive transfer paper or running of heat-sensitive transfer paper cannot be done stably.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequencies	Printed Images	Claims	KMC	Draw Desc	Ima
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48. Document ID: US 5052831 A

L1: Entry 48 of 57

File: USPT

Oct 1, 1991

DOCUMENT-IDENTIFIER: US 5052831 A

TITLE: Device for exact registration of monochrome images of a color reproduction in a thermal ink transfer printer

CLAIMS:

8. The color printer of claim 1 further comprising sheet stretch roll means disposed between the loading station and the platen roll for frictionally engaging and pulling back the recipient sheet being caught between the platen roll and the printing head, in order to take up the slack, if any, of the recipient sheet preparatory to the printing of each monochrome image.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequencies	Printed Images	Claims	KMC	Draw Desc	Ima
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49. Document ID: US 4774885 A

L1: Entry 49 of 57

File: USPT

Oct 4, 1988

DOCUMENT-IDENTIFIER: US 4774885 A

TITLE: Printing process overlaying multi-color dot images

Brief Summary Text (18):

As noted previously, in gravure printing of a four-color half-tone image, the one color half-tone images are sequentially printed directly onto the recipient paper web, with intermediate drying. However, in this invention the four-color half-tone image is first formed on the offset blanket cylinder, prior to transfer to the recipient surface. Since

the colors are printed on the offset blanket cylinder in the reverse order from the printing of those colors in gravure printing, the image which is printed on the recipient surface, in effect, possesses the colors printed in the same order as has been found satisfactory in gravure printing.

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn Desc](#) | [Ima](#)

50. Document ID: US 4605851 A

L1: Entry 50 of 57

File: USPT

Aug 12, 1986

DOCUMENT-IDENTIFIER: US 4605851 A

TITLE: Process and device for detecting foreign bodies in a liquid

Brief Summary Text (31):

In a preferred embodiment, the general control member of the device is a microprocessor also connected to a second memory, containing the general programs ensuring the train of the sequences of operation and making it possible to obtain the series of successive images, the memorizations and comparisons of the images taken in two's; to an input member of the particular programs, enabling in particular digital values of the comparison thresholds and digital control of the variable gain to be obtained; to a control console; to a printer recording the conditions of control and the results; and finally to the mechanism for gripping and handling the recipients, to which the microprocessor delivers a mechanical order sequencing signal. The microprocessor may also control one or more other microprocessors to which it delegates certain tasks, such as for example the control of the subtractor member, the comparison with the threshold(s), the synchronization of the analog-digital converter.

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn Desc](#) | [Ima](#)

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Term	Documents
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IMAG	1317
IMAGA	25
IMAGAE	14
IMAGAES	5
IMAGAGE	4
IMAGAKI	63
IMAGAMA	41
IMAGAMI	19
IMAGAN	2
IMAGANT	1
(IMAG\$3 WITH ORDER\$3 WITH PRINT\$3 WITH RECIPIENT\$3).PGPB,USPT,EPAB,JPAB,DWPI,TDBD.	57

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Search Results - Record(s) 51 through 57 of 57 returned.

51. Document ID: JP 2003016320 A

Using default format because multiple data bases are involved.

L1: Entry 51 of 57

File: JPAB

Jan 17, 2003

PUB-NO: JP02003016320A

DOCUMENT-IDENTIFIER: JP 2003016320 A

TITLE: ORIGINAL ARTICLE ORDERING SYSTEM

PUBN-DATE: January 17, 2003

INVENTOR-INFORMATION:

NAME

COUNTRY

OGIMOTO, NAOTO

AKIBA, MASANORI

HOSHINO, YASUYUKI

INT-CL (IPC): G06 F 17/60

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | **Attachments** | [Claims](#) | [KMC](#) | [Draw Desc](#) | [Ima](#)

52. Document ID: JP 2002108982 A

L1: Entry 52 of 57

File: JPAB

Apr 12, 2002

DOCUMENT-IDENTIFIER: JP 2002108982 A

TITLE: POSTCARD ORDER PRINTING METHOD UTILIZING INTERNET

Abstract Text (2):

SOLUTION: This method is provided with an image fetching step for an orderer to fetch an image to be stuck on a postcard into terminal equipment, a design selecting step for the orderer to select any one of postcard designs displayed on the screen of the terminal equipment, a sender information input step for the orderer to input sender information through the input means of the terminal equipment, a design data receiving step for receiving the image to be stuck, the data of the selected design and the sender information from the terminal equipment of the orderer to the terminal equipment of an order recipient, a destination data receiving step for the orderer to receive the data of a destination list used by the orderer from the terminal equipment of the orderer to the terminal equipment of the order recipient, a printing step for the order recipient to perform printing according to data provided by these design data receiving step and destination data receiving step, and a receiving step for the orderer to receive the completed postcard with destination.

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | **Attachments** | [Claims](#) | [KMC](#) | [Draw Desc](#) | [Ima](#)

53. Document ID: JP 08202863 A

L1: Entry 53 of 57

File: JPAB

Aug 9, 1996

DOCUMENT-IDENTIFIER: JP 08202863 A
TITLE: METHOD FOR SYNTHETIC-OUTPUTTING IMAGE DATA

Abstract Text (2):

CONSTITUTION: In order to print the illustration, etc., of contents corresponding to the recipient's attributes such as sex and age so as to interest the recipient, image data such as the illustration, etc., is previously registered in an internal memory 51 in a printer 5 as an overlay 52. Then, indication data 41 indicating an overlay to use and individual data 1 are combined to be print data 4 to send to the printer so that the printer 5 synthesizes individual data and the indicated overlay and prints the illustration, etc., corresponding to individual data such as the address and its attribute individually.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KM/C	Draw. Desc	Ima
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 54. Document ID: WO 200117227 A1, AU 200073451 A

L1: Entry 54 of 57

File: DWPI

Mar 8, 2001

DERWENT-ACC-NO: 2001-589548
DERWENT-WEEK: 200359
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TITLE: Image print distribution for computer system, involves printing copy of each image in recipient's image set for each recipient in received order and distributing printed image copies to respective recipients

Basic Abstract Text (1):

NOVELTY - Order specifying multiple recipients is received and a set of images are associated with each specified recipient. Copy of each image in the recipient's image set is printed for each specified recipient in the received order. Printed image copies are distributed to their respective associated recipient.

Basic Abstract Text (4):

ADVANTAGE - Provides an intuitive and robust environment in which the user orders image prints to be distributed to multiple recipients while minimizing user's time, effort and expense in placing the order. Eliminates the need for re-entering redundant information by the user and enables the user to satisfy minimum dollar amount without being forced to order more prints. Enhances the flexibility and convenience of the print ordering process by allowing the user to specify different print parameters. Enables to distribute sets of prints to multiple destinations quickly and increases print generation speed and efficiency.

Standard Title Terms (1):

IMAGE PRINT DISTRIBUTE COMPUTER SYSTEM PRINT COPY IMAGE RECIPIENT IMAGE SET RECIPIENT
RECEIVE ORDER DISTRIBUTE PRINT IMAGE COPY RESPECTIVE RECIPIENT

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KM/C	Draw. Desc	Ima
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55. Document ID: US 6657702 B1, WO 200116650 A2, AU 200113649 A

L1: Entry 55 of 57

File: DWPI

Dec 2, 2003

DERWENT-ACC-NO: 2001-273355

DERWENT-WEEK: 200379

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TITLE: Photographic print re-order facilitating method for computer system, involves encoding photographic print with identifier including error detection character and check sum values

Basic Abstract Text (6):

ADVANTAGE - Provides users with intuitive and robust environment in which a user can order image prints to be distributed to multiple recipients while minimizing user's time, effort and expense in placing the order.

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [Claims](#) [KMC](#) [Draw. Desc](#) [Ima](#)

56. Document ID: US 20040109147 A1, WO 200116651 A1, AU 200071020 A, AU 200073424 A, US 20020065741 A1

L1: Entry 56 of 57

File: DWPI

Jun 10, 2004

DERWENT-ACC-NO: 2001-235135

DERWENT-WEEK: 200438

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Image print distribution method involves associating images with each recipient specified by the order and separating images associated with each recipient into printable unit of images

Standard Title Terms (1):

IMAGE PRINT DISTRIBUTE METHOD ASSOCIATE IMAGE RECIPIENT SPECIFIED ORDER SEPARATE IMAGE ASSOCIATE RECIPIENT PRINT UNIT IMAGE

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [Claims](#) [KMC](#) [Draw. Desc](#) [Ima](#)

57. Document ID: DE 69527627 E, WO 9530961 A1, AU 9526361 A, US 5555496 A, EP 760983 A1, AU 682969 B, US 5960412 A, US 6092054 A, EP 760983 B1

L1: Entry 57 of 57

File: DWPI

Sep 5, 2002

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TITLE: Interactive communication system for selection, ordering and delivering social expression cards - has integrated database of digitised card images which are retrieved in accordance with user's selection for designated recipients

Basic Abstract Text (2):

The user may send the order to a card distribution centre (40), which processes the

order, retrieves and prints the selected card images, including any user messages or user signature, and mails the cards to designated recipients or customers. The system maintains a database of all recipients, addresses, associated occasions and dates (100), card preferences, relationships (111,112) and order history (105).

Equivalent Abstract Text (2):

The user may send the order to a card distribution centre (40), which processes the order, retrieves and prints the selected card images, including any user messages or user signature, and mails the cards to designated recipients or customers. The system maintains a database of all recipients, addresses, associated occasions and dates (100), card preferences, relationships (111,112) and order history (105).

Equivalent Abstract Text (12):

The user may send the order to a card distribution centre (40), which processes the order, retrieves and prints the selected card images, including any user messages or user signature, and mails the cards to designated recipients or customers. The system maintains a database of all recipients, addresses, associated occasions and dates (100), card preferences, relationships (111,112) and order history (105).

Equivalent Abstract Text (15):

The user may send the order to a card distribution centre (40), which processes the order, retrieves and prints the selected card images, including any user messages or user signature, and mails the cards to designated recipients or customers. The system maintains a database of all recipients, addresses, associated occasions and dates (100), card preferences, relationships (111,112) and order history (105).

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